

The CAVALRY JOURNAL

IN THIS NUMBER

103 Fights and Scrimmages:
Story of General Bernard

—Don Russell.

A Mobilization Test

—Captain Wesley W. Yale,
1st Cavalry Division.

Pershing and
the Anvil Chorus

—H. A. DeWeerd.

Battlefield Mobility

—Colonel Joseph A. Baer,
(Cavalry) G. S. C.

The Cavalry School
Digest of Information

(Devoted Principally to Machine
Guns and 37-mm. Guns.)

A Famous War Horse



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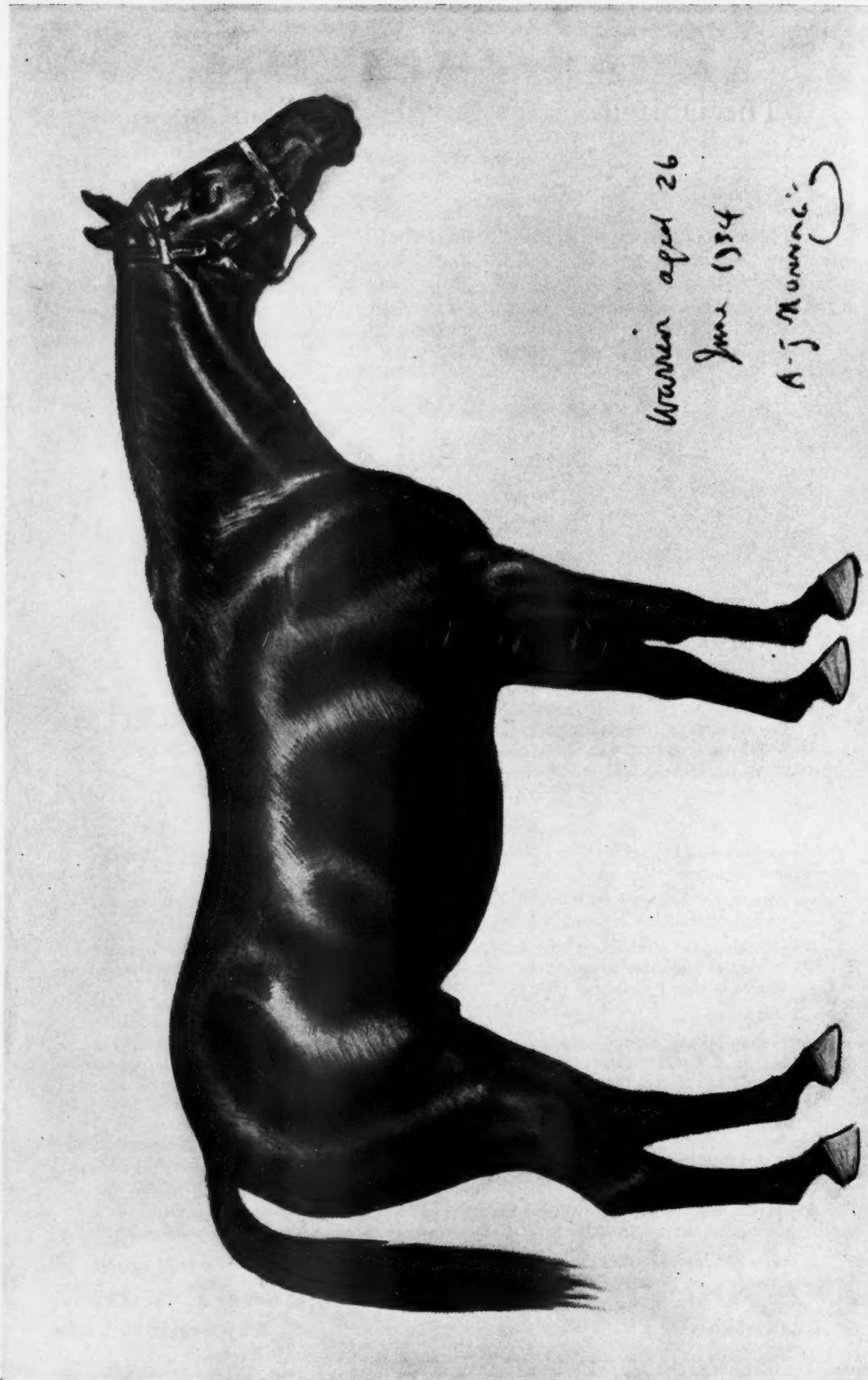
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Waddie aged 26

June 1934

A. J. Munro

Famous War Horses

V. WARRIOR

WITHIN sound of the sea at Yafford, in the Isle of Wight, was born nearly twenty-eight years ago a colt destined to fully justify the name *Warrior* through ordeals more intense than almost any other horse of his time.

Owned and frequently ridden by General Jack Seely (Lord Mottistone), who commanded the Canadian Cavalry brigade, he saw more than four years of war, much of it in the front line, and, by a series of almost miraculous happenings, came through unscathed.

His narrow escapes from death were many and varied. He was said to be the luckiest horse on the Western Front, and certainly must have had a charmed life. Once a great shell struck near him, and he was completely buried under the falling earth except for one foreleg. At Ferté-sous-Jouarre he was one of a few survivors when a shell fell in the midst of a bunch of horses. At another time a German shell, breaking in two instead of bursting, cut in half a horse standing near *Warrior*. On March 26, 1918, while General Seely and Colonel Macdonald, commanding Strathcona's Horse, were conferring, with their horses' noses practically touching, the horse of Colonel Macdonald was shot and instantly killed. A little French villa with *Warrior* inside was struck by shell and knocked down, but *Warrior* escaped with only a slight shoulder lameness. Once when *Warrior* was stuck fast in the mud a German flew down and emptied his machine gun belt at him and General Seely, but without injury to either. On numerous other occasions the enemy fire came dangerously close.

He was with General Seely during the advance to the Marne; at the first battle of Ypres; at the Battle of the Somme; in the fighting at Paschendaele; when they captured Equancourt, and again at Guyencourt; he came close to the enemy fire at the first and second battles of Cambrai; and went through many other historic fights; but his greatest ordeal and most miraculous escape was in the Battle of Amiens in 1918, when he carried his master at racing speed through the danger of swift bullets to plant a flag and establish brigade headquarters at the point of the Bois de Moreuil ahead of the main attack of the Canadian Cavalry.

On all occasions when the decision was taken to advance, *Warrior* became a changed horse. He would quiver, not at all from fear, but from the joy of battle, and when he started to gallop, one could feel the great muscles of his body extending as he bounded forward.

Although *Warrior* repeatedly escaped death on the battlefield, it seems almost incredible that he was saved fatal wounds no less than five times due to the fact that General Seely had on those occasions chosen to ride another horse, leaving *Warrior* behind to rest or to recover from an injury. In each instance, the horse ridden in *Warrior's* place was killed by enemy fire.

Warrior was a bay gelding of about 15.2 hands, with a small, intelligent head and deep girth. He was an ideal charger of the short-legged, thoroughbred type. He was never sick, never at a loss in an emergency, always full of life, "yet placid and as steady as a rock in the cataclysm of battle." He had an unselfish loyalty, indomitable courage, exhibited an entire disregard of danger, and always gave of his best.

General Seely, a great soldier who loved and understood horses, gives *Warrior* full credit for his own success. "At the crisis of my life," he says in his book *My Horse Warrior*, "it was my horse *Warrior* who carried me through from impending disaster to success. . . . Not only did his vivid personality help me to gain the confidence of thousands of brave men, when without him I could never have achieved it, but, by his supreme courage at a critical moment, he led me forward to victory in perhaps the greatest crisis of the War. This is a high claim to make for any creature. . . . As time went on, the men came to love him more and more. As I rode along, whether in rest billets, in reserve, approaching the line, or in the midst of battle, men would say, not 'Here comes the General,' but 'Here's old *Warrior*!'"

The years have passed lightly over *Warrior*. He now spends most of his time in the same great grass field, within sound of the sea, in which he enjoyed his earliest years.



"Then, advancing at a gallop, we commenced firing."

One Hundred and Three Fights and Scrimmages

The Story of General Reuben F. Bernard

BY DON RUSSELL

(Concluded from January-February number.)

IX THE SHEEPEATER CAMPAIGN*

IT was early in May of 1879. There was a hint of spring in the air at Boise Barracks that was belied by the heavy snow on the mountain tops to the northward. But an unfailing sign of spring in that period of the old west had arrived that moment from headquarters of the Department of the Columbia at Vancouver Barracks.

"Well, Bernard, here are your orders for the summer campaign," said Captain Collins who had summoned his cavalry commander immediately upon the receipt of the

dispatch. "Five Chinamen killed by the Sheepeaters at Oro Grande."

"I'll have the troop turned out at once."

"Oh, there's no hurry about it, Colonel. The killing took place last February. And besides the order says you are not to start before June 1st. This is one time you will have to hold your horses, and I think I am going to enjoy watching you get ready for an expedition in an orderly and military manner, instead of dashing off and winning the war before anyone else gets a chance, as you usually do. But there's the order. Read it."

"Small band of Indians composed of Sheepeaters, Piutes and Bannocks who escaped from the hostiles last year—I thought they'd find some of the Bannocks got away in that direction—located on the Middle Fork of the Salmon River—I didn't know there was one. 'A force will be sent from Camp Howard . . . about fifty effectives. . . . The department commander desires that Captain Bernard be placed in command.' Well, now, that's right handsome of the general."

*BIBLIOGRAPHY: *The Sheepeater Campaign*, by W. C. Brown (Idaho Historical Society, 1926); "We Never Forget," by W. C. Brown in *The Quartermaster Review*, March-April, 1926; "The Sheepeater Campaign," by C. B. Hardin in *Journal of the Military Service Institution*, 1910; "The Sheepeater Campaign," by C. B. Hardin and T. E. Wilcox in *Recreation*, June, 1907. Journals or diaries of E. F. Albrecht, R. F. Bernard, W. C. Brown, John Corliss, Edgar Hoffner, Orlando Robbins, John Neville, and L. A. Secor.

"That's not all. He really means it. Read on," Collins demanded. Bernard spelled out the order slowly and with some difficulty.

"—And if he be not at the post by the time indicated for starting that these headquarters be notified by telegraph of the fact. It is expected that when the two commands come together Captain Bernard will be the ranking officer and the command of both forces will devolve upon him. This is the intention of the department commander.' Well—"

"It looks like your benefit, Bernard. By the way, I am making one change in your orders. You will go up Loon Creek instead of eastward to Challis. I've just had a report that two ranchers have been killed by the Indians at the South Fork of the Salmon. The place is called Johnson's Ranch and Hugh Johnson is one of the men reported killed. The other is his partner, Peter Dorsey. But I think you had better look in on the Chinamen first and see if you can pick up a trail there. Then you can work westward toward the force from Camp Howard, and visit Johnson's ranch on the way. I'll notify headquarters to that effect."

"I don't know much about the country."

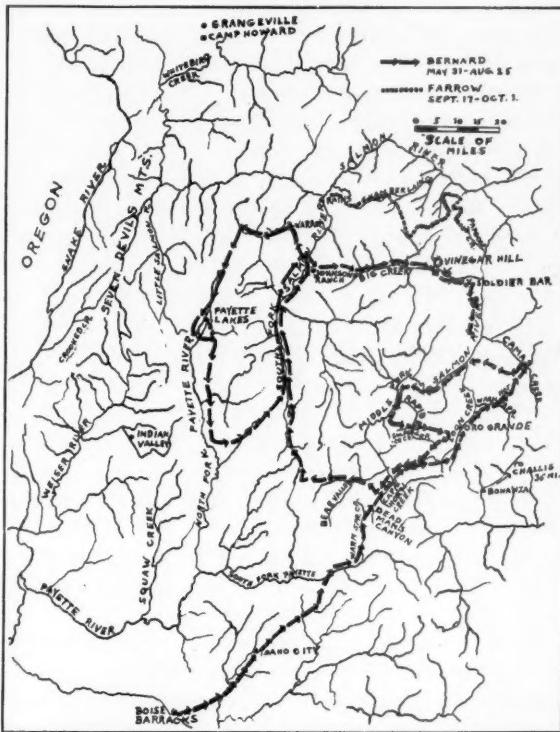
"Neither does anyone else. Most of the maps we have leave middle Idaho a perfect blank. Here's a late government map that encloses the entire section you are going into with a dotted line and marks it 'UNEXPLORED.' We know a little more than that; that there are three forks of the Salmon River, that there is Loon Creek and a few more, but just how they run we're not sure. Rube Robbins knows a little about it, and there is a little Dutchman here, Johnny Vose, who claims to know all about it, and I will give him to you for what he is worth. The Fletcher map probably is the best, and between all of them I suspect you and Rube will have to follow your own ideas."

Company G, of course, was always ready, so it was especially well prepared on this occasion. Upon reading the order carefully, Bernard noted it said "on or about" June 1st, so, as might be expected, it was nine o'clock on the morning of May 31st that Tommy Fenton's trumpet sounded "Boots and Saddles," sending some sixty enlisted men on the backs of their California broncos, ready to go. A pack train in charge of ten civilian employees carried sixty days' rations for the command.

From the start the pack train was in trouble. The first day's march was thirty-five miles to Idaho City, even then an old placer mining town, six thousand feet in elevation. The pack train fell behind, and the men had very little to eat until it got in, after nine o'clock at night. The next day the march was forty miles down hill to the East Fork of the Payette River, and again the pack train did not get in until after nine. The third day the pack train suffered its first losses when mules were rolled over and over in the swift current of Hot or Warm Creek. The loss was only two boxes of hard bread, a sack of sugar, and a sack of salt, partly compensated for by Vose's luck in killing a deer. Another bad sign was

the fact that snow two feet deep was encountered—on the second day of June.

The next day real troubles began. The troop entered Dead Man's Canyon, so called because two men had once been buried there by a snow slide. The steep sides of this canyon collected snow that seldom had a chance to melt—in some places it was found to be twenty feet deep. But the surface was so hard that it would bear the weight of a horse, and the cavalrymen were able to



MIDDLE IDAHO. Showing scene of Bernard's 1879 campaigns, his route from May 31st to the break-up of the expedition against the Sheep-eaters, and the route of Lieutenants E. S. Farrow and W. C. Brown in their final drive from Rains' Ranch to the point where the Indians surrendered.

(From map by Brigadier General W. C. Brown in his *The Sheep-eater Campaign*.)

struggle through for eight miles by leading their mounts. "Every few minutes a horse, or a trooper, or both, would stand on their head, but would come up smiling, or the opposite, usually the opposite," Private Edgar Hoffner has recorded. Then after getting out of the snow, rain started and there were five miles of mud to be negotiated. Another extract from Private Hoffner's diary will give a view of the less enjoyable features of such campaigning. "I was troubled with an aching tooth," he records, "and having no dentist, I sat astride a log and pried out the offender with my pocket knife." Of course the pack train could not keep up. Fortunately Bernard had killed a deer that morning with the trumpeter's rifle, and Vose had killed another, so there was venison for dinner, but little was left for the evening meal.

June 4th was spent waiting for the pack train, and in building a bridge across Cape Horn Creek, so it could move on when it arrived. Meanwhile there was nothing to eat except grouse, fool hens, and ground squirrels. All day it rained and snowed. But at seven o'clock the pack train got in, to the great joy of everyone except Second Lieutenant John Pitcher. One of the mules had lost his footing in crossing a stream, and in order to save the animal, its pack had been cut loose. It happened to be the pack containing all of Lieutenant Pitcher's blankets and personal belongings. Of course he was ready to volunteer to go back next morning to help bring in the rest of the load. On the way he found his bundle caught in some driftwood, so he returned to camp happy again, with the pack train the next night. June 6th, next day, was spent in rest. The troopers had put up their shelter tents—even then called "pup tents"—and advantage was taken of the halt to have all the horses reshod. There was no rest for the troop blacksmith. The shoes were put on cold, but of course had been fitted previously, each soldier carrying a set of shoes for his own animal.

The marches became short, because of snow, rain, mud and difficulties with the pack train at every crossing of small, but swift, streams. Only ten miles was made June 7th and fourteen miles the following day. This was across the mountains in the snow, and Johnny Vose soon confessed himself lost.

"Why do you think you are lost?" asked Bernard, more amused than alarmed.

"Vel, me no see de trail; me no see any t'ings dat I knows; me no see de blazes on de trees," said the excited trailer.

"How do you expect to see a trail where the snow is ten or twelve feet deep?" Bernard inquired. "Do you think the blazes were cut in the tops of the trees? I don't think we are lost, for there is no other way to go. So don't worry about it."

But soon the snow became less deep, and Johnny was cheered by finding some of the blazes he had been looking for. That night the command camped on Loon Creek, and the next day reached Oro Grande, or Casto. This town in 1877 had enjoyed a considerable gold strike. Its placer mines had been worked for a long time, and a considerable village had grown up, but at last the claims were worked out and the miners had gone on to rosier-looking fields, selling out their holdings at a small price to Chinamen who were glad to go over them for smaller profits. This had been the history of mining in many parts of the old west. In February the Chinamen had been killed and the town burned. It was never proved that this was done by Indians, and it is possible the Chinamen were killed for their gold by white robbers. It later was found that the Sheepeaters or Tukuarikas, a division of the Shoshoni, named for their living on the Rocky Mountain sheep, wintered at a spot that made it improbable that they had visited Oro Grande in February.

The town was not entirely abandoned in June. Three white men were found there, "waiting for something to

turn up," says Bernard. In a garden, presumed to belong to one of the dead Chinamen, was a fine lot of green onions. "We threw out a skirmish line and charged," says Private Hoffner, "and in ten minutes there was not an onion left to tell the tale." But the tale was told, nevertheless. The next day there appeared a Chinaman from Bonanza City, thirty miles away, who stated with many protestations and much volubility that he was the rightful owner of the onion patch. His claim was allowed by Colonel Bernard and settled for twenty-five dollars, probably a cheap price for a gold region, and very likely



"In ten minutes there was not an onion left to tell the tale."

a good investment for the prevention of scurvy among the troops. But the twenty-five dollar onions did not go very far, and within two days the troopers were again eating "scouse," a dish probably not described in the modern *Cooks' and Bakers' Manual*, but which consisted of stewed hard-tack and bacon fat. The hunters found a few deer, half-starved ground squirrels, wide-footed mountain rabbits, and fool hens to help out. The fool hen, identified as the Franklin grouse, is described by Bernard as a dark brown bird with red over each eye, so gentle as to be killed easily with a stick, and seldom frightened away even when sticks are thrown at it again and again.

While resting here Bernard sent to Bonanza for newspapers and to get information. Meanwhile he sent his pack train, unloaded, back to help a train that was bringing him additional supplies from Boise Barracks. By this time many of the packers were ready to quit. They had had quite enough of working in snow and rain. To add to their troubles, the streams were now rising so rapidly that it seemed to be impossible to cross them in the direction Bernard wanted to go. An attempt in another direction developed a rocky country impassable for animals, so much so that one of the horses of the scouting party was severely cut by a fall on the rocks. If this were not enough, both Lieutenant Pitcher and Rube Robbins were taken seriously ill with mountain fever. "I am the doctor," Bernard records, "and have nothing but cathartic and quinine pills to give them, while this and brandy is our supply of medicines—I wouldn't know how to use but very few other medicines if I had them."

So far, very little had been learned about the Indians. The reports of prospectors who had come into camp from Bonanza were vague. Later there arrived a prospector from the Yellow Jacket mining district who reported he had seen Indian signs on Camas Creek, some seventy miles away. "The man has a rifle and eighteen cartridges, two blankets and about thirty pounds of flour, and says he has eaten nothing but bread and salt, with an occasional grouse, for six months," Bernard records. "He is looking well, is cheerful, ragged and dirty. So we will march in the morning and go to the place where the man says he saw the Indian signs though I don't believe his story at all."

Lieutenant Pitcher, having recovered, undertook the bridging of Loon Creek. His solution of this engineering problem was to drop a tree across it, but several trees broke in falling and were carried away. At last one was dropped to span the stream. By that time the day was spent and next morning it was found that the water had fallen sufficiently to permit the animals to cross, so the bridge was not completed. At about this time John S. Ramey, an experienced guide, had joined, being sent from department headquarters. After leaving Loon Creek, the command followed a second Hot Creek, or Warm Creek, which had to be crossed several times with a net loss of two mules and four packs. The hot springs along this stream, however, provided warm baths that were much appreciated by the men as they made camp after a march of eighteen miles.

The West Fork of Camas Creek was reached on June 21st and all was made ready for an attack on the Indian camp reported there. Soon fresh pony tracks were seen. The command was halted, cinches tightened, the troopers remounted and a charge was ordered. As the gorge opened out into a wide flat, smoke was seen up the canyon and horses grazing in the valley. The troops galloped until the horses were passed and then Bernard brought the command to a walk to align his force for the final charge. As he did so he saw three miners with rifles running for the rocks at the side of the canyon. It was the smoke of their fires that had been seen by the owner of the eighteen cartridges. The miners, when assured that they were not being charged by Indians, reported that they had spent the winter along Camas Creek and had seen no signs of the Sheepeaters.

For the next few days the march was continued under the usual adverse conditions—rain, snow, mud, and, as an additional feature, a hail storm with hailstones as large as pigeon eggs reported. If this seems large consider the estimates of a few men hit by them, who said the hailstones were as large as water buckets. In crossing one mountain a mule tumbled and rolled from top to bottom, a distance of six hundred yards, and was reported dead. He came limping into camp the next day, considerably bruised, but able to continue the journey. At last the mountains were crossed and the valley of the Middle Salmon River reached in a rapid descent—"within a dis-

tance of ten miles," says Bernard, "we have come from ten feet of snow to roses and rattlesnakes." The presence of the rattlesnakes was impressed on his mind by finding one about sixteen inches long, coiled in his blankets one morning. "As the morning was quite cold," Bernard remarks, "the snake was very inactive. He was gently laid in a camp fire to get warm."

The valley of the Middle Salmon had never been followed by anyone, according to Ramey. It had been tried in the winter on the ice, but there were too many rapids and waterfalls. For the most part it ran through a gorge with perpendicular banks, reaching up into the mountain ranges on either side. This was the trail Bernard now attempted. Trouble started at the crossing of Loon Creek near its mouth. A bridge was constructed for the men, but it was not suitable for the animals. In swimming the mules across many were carried far down stream. One mule displayed remarkable intelligence in seizing a strong willow bush with its teeth and holding on until it could be pulled out with ropes. When rescued it was given three hearty cheers by the men. But two thousand cartridges, two hundred pounds of horseshoes, a box of hard-tack, three sides of bacon and a pack saddle were lost, and to add to Bernard's gloom, when he went hunting he killed only five grouse "and got a shot at a deer, and should have been kicked for not killing it," as he records disgustedly. During the next five days trail was made with pick and shovel during the day, and in the evening an officer and a guide would scout the country ahead to see if further progress was possible. This slow progress was continued at the rate of ten to eighteen miles a day for a total of seventy miles.



One mule holding on (with its teeth) until it could be pulled out.

On the first of July the command was halted at Rapid River, a narrow torrent that it was necessary to bridge. A large tree was dropped across the stream, and small logs lashed on either side, on the top of which branches were laid and leaves and earth spread. The animals took to this bridge more readily than had been expected, but, needless to say, none of the men attempted it mounted. After the command had entirely crossed, the bridge was dismantled to recover the ropes used as lashings, leaving only the single log, and there was much speculation as to the amazement of anyone coming along in time to see the trail of a company of cavalry and its pack train leading down to and away from a single log. It would appear

that all of the horses and mules were accomplished tight-rope walkers.

The next day the trail was so steep that eight mules fell and rolled into the river, six of them swimming to the opposite side, and the other two being drowned. Lieutenant Pitcher swam his horse across the stream—again it was his baggage that was in trouble—and with the aid of the chief packer, Jake Barnes, recovered the six mules. Three packs were lost in this accident, and all the sugar and salt washed away. The losses were rapidly becoming so heavy as to endanger the success of the expedition. Fortunately game was plentiful—mountain sheep, deer and bear were found. That a famous scout may occasionally miss a shot is recorded in this connection, for Bernard notes that, "Robbins met a black bear and shot at it, but did not kill it. Some of the men asked him if he only tried to scare it away, as it was but about fifty yards from him. This seemed to plague Robbins very much, as he prides himself on being a good shot."

There were other bear stories. Major Hardin tells of a man he refuses to identify further than as "Reddy," whose boast was that he had discovered a certain method of disposing of a wounded bear. He would lie on his back, so he said, and allow the bear to walk over him, whereupon with a swift upward motion of a very sharp knife he would deprive the bear of large sections of its vital organs. Naturally his companions were eager to see this method demonstrated and hoped to find a sufficiently angry wounded bear to be worth Reddy's attention. At last the chance came. A bear was wounded. They followed the trail of blood. "The more blood Reddy saw, the braver he became," says Major Hardin. "He was soon quite a warrior, taking the lead, partly through his own bravery, but chiefly through our courtesy." But when the bear was found, it was much alive and quite active. For some reason Reddy did not try his superior method, but instead ran briskly to take refuge on top of a tall rock, definitely refusing to demonstrate. The bear obligingly turned attention to Reddy's companions, and a few more shots ended the animal's career.

After July 2d the canon closed in, and further progress along the stream became impossible. The command was forced into the mountains and turned back eastward toward the old trail. The 4th of July was spent at a sulphur spring at the headwaters of Rapid River—or Crooked River, as Bernard calls it at this point—used as a lick by elk, moose, deer and Rocky Mountain sheep to so large an extent that for a mile from the spring the ground was described as cut up like a barnyard. The next day the old trail was reached, about six miles south of Oro Grande. At the Cape Horn River, near the point where the command had waited so long for the pack train in June, a halt of twelve days was made, while the train was sent into Boise Barracks to replenish supplies.

"We have traveled over much country that no white man ever saw before, our guides and all miners declaring we could not get through at all," Bernard reported at this time, adding optimistically, "All streams are now

falling fast, so I hope to get along with less trouble and less loss of rations than heretofore."

This optimism was justified, at least for the time being, and in the next stage of the campaign Bernard moved more rapidly and with little loss of rations. Up to this point he had scouted thoroughly the country east of the Middle Fork of the Salmon River, but had been unable to cross that stream and had turned back toward its headwaters. He now crossed over to the headwaters of the South Fork and moved down it to the main Salmon River. The Johnson Ranch, where two men had been killed by Indians, was reached July 29th. This



A large tree was dropped across the stream.

part of the trip had not been without incident—there was still much snow, mud and rocks, but these presented little difficulty. Bear, deer, salmon and trout varied the menu, although the pack train was not losing quite so many sides of bacon and boxes of hard-tack. To give some further idea of how the troopers fared, Private Hoffner's recipe for baking bread may be cited. He had obtained some flour, with which he kneaded his dough on a rubber poncho. "Then dug a hole in the ground large enough for a mess pan about ten inches in diameter, then put in hot coals and heated hole, then placed dough on a tin pan, turning mess pan over it, placing coals over all and baked till done. We had salt and baking powder. The baking was a success. We then made gravy of flour, water and bacon grease. With venison steak and coffee we had a fine supper."

So far Bernard had received little information from the other forces in the field that were supposed to come under his command. One of these, under Lieutenant Henry Catley, had started from Camp Howard, north of the Salmon River, June 4th and had moved by way of Warren's and Rains' Ranch to Big Creek, between the two forks of the Salmon that Bernard had scouted. Catley had with him Lieutenants E. K. Webster and W. C. Muhlenberg and Company C and a detachment of Company K of the Second Infantry.

The other was a force of twenty Umatilla Indian scouts from their reservation in Oregon. It was led by Lieutenants Edward S. Farrow and W. C. Brown, and included seven enlisted men of Farrow's regiment, the Twenty-first Infantry, and a small pack train with a half

dozen civilian packers. Farrow now reported that he had moved eastward as far as Payette River, but had turned westward on a report that the Sheepeaters were in the vicinity of Crooked River. Bernard received this report July 29th, and considering that Catley had a sufficient force to take care of himself operating in the only other section of the country where the Indians were likely to be found, decided that his best move would be to support Farrow's small command which, it seemed most likely, was following the main band of the Indians. Accordingly he moved out toward Warren's Diggins, since known as Warren, which at this time consisted of a hotel, a blacksmith shop, two or three general merchandise stores, two saloons and about two dozen dwellings, and was connected with the outside world only by a trail. Earlier in the day the troops had feasted their eyes on the spectacle of a Bannock squaw, wife of a white man, the first woman they had seen in two months. But at Warren's the gentler sex was more adequately represented by one white woman and one Chinese woman. Civilization was soon left behind, however, and the march was continued until August 4th, seventy miles in the wrong direction, as it proved. For it was now learned that Farrow had been following a false report much like that investigated by Bernard early in the campaign. The camp, supposedly of hostiles, proved to be only a party of miners, and while Bernard was on this wild goose chase, it was Catley who was in sad need of assistance.

For Catley had really found the Sheepeaters. While following an Indian trail his command was ambushed by hostiles concealed behind a wall they had built of loose rock. Two men were wounded and the lieutenant ordered a retreat. Within about two miles he met his pack train and went into camp. The next morning, July 30th, the retreat was continued, but the Indians, actually numbering twenty-seven at the highest estimate, seemed to be on all sides of them, so the troops took refuge on an eminence afterward known as Vinegar Hill for the reason that the troops lacked water, so drank vinegar from the provisions. The Indians set fire to the grass but Catley's men were able to save themselves by counter-firing. That night they retreated, abandoning most of their baggage. By this time the force was considerably demoralized and was headed back to Camp Howard by the shortest route until halted by peremptory orders to await the arrival of Bernard and of Captain A. G. Forse who was ordered out as a reinforcement with twenty-five men of Company D, First Cavalry.

Meanwhile the Indians attacked Rains' ranch, killing the owner, James Rains, and wounding Albert Webber.

Bernard hurried back from his wild goose chase, being joined on the way by Farrow's party August 6th, by Catley's company August 11th, and by Forse's troop August 12th. With these accessions he had a total of one hundred and seventy-eight officers and men, including scouts, guides, twenty Indians and twenty-two civilian packers. The next day he started a most difficult march. So steep is the canyon of Big Creek that at some

points sunset came at two o'clock in the afternoon, according to reports. It is so narrow that often it was necessary to march for considerable distances in the water, where sharp rocks crippled the animals. The ponies of the Indian scouts, not being shod, suffered severely. Their hoofs were softened in the creek and the hard lava rock wore them down to the quick, with the result that half of them gave out and had to be shot to prevent their falling into the hands of the enemy. Many crossings of the creek were necessary—Private Hoffner records three on August 16th, ten on August 17th, seven on August 18th, and thirteen on August 19th. On this last day Farrow's scouts discovered the Sheepeaters, attacked them and pursued them several miles, capturing their camp and recovering a large part of the supplies they had taken from Catley's command. Bernard closely supported the scouts, but the hostiles kept moving and no general fight occurred.

The next day Bernard decided to send Catley's company back along the trail to meet an expected supply train, as rations were badly needed. At the same time he intended to continue the pursuit with the rest of the command. So at sunrise the infantrymen started on the back trail, while Troops D and G started the ascent of a very precipitous slope, leaving behind the two pack trains under a small guard, which were to follow as soon as made ready. Farrow's scouts had gone ahead as advance guard.

Bernard had been gone scarcely an hour when a sound of heavy firing was heard from the camp, the discharge of the carbines sounding almost as loud as artillery in the narrow canyon. Immediately Lieutenant Pitcher turned his horse around and started for the scene.

"Hold on, Mr. Pitcher," Bernard shouted. "Deploy as skirmishers and take it easy. We might catch something on the way down."

"But they might get the pack train," the lieutenant urged.

"Not by a damned sight," Bernard answered. "They've got a bear by the tail. I have men down there. Don't you hear the carbines?"

Bernard did have men there. It was only seven of them, but five were men of Troop G, which made a difference.

At the first fire from the hidden Indians, Private Harry Eagan of Company C, Second Infantry was mortally wounded, shot through both thighs. Before there was time for another volley, the sergeant and pack train guard from the Second Infantry had faded out of the picture. This left the fight up to Corporal Charles B. Hardin and his six troopers, two of D and four of G of the First Cavalry. Quickly they moved to a flanking position up the mountain. In this movement they had one ally, Jake Barnes, the chief packer, who moved his one hundred and twenty-five mules to a sheltered place, then picked up a rifle that had been dropped by one of the fleeing infantrymen and joined the corporal with the remark, "I

want some of this myself. Private Barnes reports for duty, sir." This assistance from a noncombatant civilian employee cheered the men tremendously. The Indians, numbering about ten to fifteen, were driven off before Bernard returned. The courageous "little Dutchman" Johnny Vose was first of the relieving force to join the pack train guard.

Private Eagan had been carried out of danger, but was very seriously injured. The surgeon, T. E. Wilcox, who had quite an adventurous service on this campaign, attempted to amputate a leg, but Eagan died during the operation. He was buried on the spot. In 1925 the cemeterial division of the Quartermaster Corps, assisted by his regiment, erected a small monument to mark his grave, and so isolated is the region even today that the headstone was transported from the nearest railroad station seventy miles by wagon and nearly forty miles by pack mule.

The next day the two commands started out again, Bernard catching up with Farrow's scouts that night. Farrow had continued to push the Sheepeaters and had captured much of their supplies and some thirty abandoned horses and mules. The Indians had killed two horses and one mule for food. But Bernard's force by this time was almost as bad off, so he now issued what rations he had to Farrow, retaining only enough to last the two troops until they could reach Loon Creek where he expected to meet a pack train. In this he was disappointed, so he turned Forse's company back in the hope that it could get enough from Farrow to reach Catley with the expected supply train. But supplies failed on all sides. Farrow already was headed back, the supply train failed to meet Catley, and Forse had a starvation march back to Rains' Ranch. When Bernard reported the condition of his troop he was authorized to return to Boise Barracks to refit. He reached there September 8th.

So far the campaign had failed in its main object of rounding up the troublesome Indians, and with all of the troops returning to their stations there seemed no hope of accomplishing it. But Lieutenants Farrow and Brown determined on one more effort with their Umatilla Scouts. They rounded up an insufficient pack train and left Rains' Ranch September 17th with a total of twenty-three men, including packers. South of the Salmon and west of the Middle Fork they captured two squaws, a papoose and a boy. A few days later the infant Sheepeater became honored on the map of Idaho by the name Papoose Gulch, which recalls the fact that he cried all night to the discomfort of the command while his mother tried unsuccessfully to get in touch with the hostiles with overtures for a surrender. After several negotiations fifty-one members of the band surrendered early in October. This ended the career of the Sheepeaters.

An off-hand judgment might find that Bernard had failed to accomplish anything and that Lieutenants Farrow and Brown with their scouts had brought the campaign to a successful conclusion by persuading the hostiles to surrender. Bernard's company had marched one

thousand, one hundred and sixty-eight miles and the only fight to its credit was that of five of its enlisted men on Soldier's Bar of Big Creek. It had lost forty-five mules, eighteen horses and an immense amount of supplies. It then returned to its home station in a crippled condition.

But without detracting from the credit due to the two second lieutenants and their command, a service later given recognition by the brevet commissions of first lieutenant voted to Farrow and Brown and the naming of a peak in Papoose Gulch "Farrow Mountain," it may be pointed out that they did not surround the Sheepeaters and force a surrender. Very skillfully the two young officers negotiated with the hostile band and persuaded its leaders, discouraged by the unflagging pursuit by men of their own race, to give up the fight. But the Sheepeaters were ready to quit because of the demoralizing effect of that relentless drive led by Bernard down Big Creek, a pursuit pushed so vigorously that for once the Indians suffered even more than the troops. Their camps were destroyed wherever found, and they were reduced from fating on the Rocky Mountain sheep that had given them their name to horse steak and mule roast. Farrow's scouts were the spearhead of that drive, and had most of the fighting, but the consistent and close support of Bernard and the two troops of the First Cavalry in rear kept the Indians on the run. Bernard would have liked nothing better than to have them make a stand so he could get at them. Only once did they succeed in doubling back, and then they got so warm a reception from the small guard of Bernard's men that they did not attempt it again.

That Farrow and Brown had the courage and capability of making a final effort brought them deserved success. But Bernard's masterly movement, following upon a defeat for the troops, was the factor that made the surrender possible. And so far was Bernard's troop from being used up that even then it was again in the field.

Only eleven days after the arrival of Troop G at Boise Barracks it was ordered out again, on a report that Indians had raided in the valley of Squaw Creek, a branch of the Payette River. This locality was south and west of any of the territory scouted over previously during the summer. The report arrived at 8:00 A.M., September 19th, and the troop was on the road by 9:00, and that night was at the scene of action, having marched fifty miles.

Private Hoffner, who had been in Bernard's troop many years, was very skeptical of this Indian raid. Perhaps he was disgruntled at being routed out again, just after having been comfortably settled down for the winter, but he seems to take the whole story with more than a grain of salt. "We came to a flat," he says, "where we were told by the guide a party of citizens had a fight with the Indians. We found a carcass of beef, or part of it, that the so-called Indians had killed. . . . My private opinion is that the party was whites, as they had left too much of the beef behind them for Indians, and they had cleaned the tripe, and took the tongue, and took off the

hide as a civilized person would do. . . . My opinion is that citizens of the valley, having grain and hay to dispose of and no market near, hit on this plan to make a few dimes. We have only a man's word, one we know nothing of, that a boy was wounded. . . . We failed to see the boy, or any indication of where the party was. There are several old Indian fighters in Troop G, Colonel Bernard and self included. We found no trail."

Nevertheless they marched over mountains and valleys to the northward, with no indication of doubt that they were trailing a band of marauders. It has been noticed before that Bernard did not hesitate to investigate any rumor, however much he doubted its truth, if there was nothing better to do. But his move to the northward, to the sites of camps of the summer campaign, suggests that he had in mind Farrow's scouts still operating in that region. Miners in the vicinity of Payette Lake reported they had seen no sign of Indians.

At one ranch the troopers were charged seventy-five cents for a dozen eggs, or a pound of butter or a gallon of milk. Private Hoffner was so ungrateful as to wish this rancher a few nights of nightmare and to express pity that no soap could be raised, as "his wife and children seem entire strangers to that useful commodity." But in contrast, at Solon Hall's ranch in Indian Valley, the soldiers found a beef dressed for them when they arrived, and they were told to help themselves to potatoes, cabbages and onions in the garden.

While in the mountains Bernard's horse fell over a bank, breaking its neck, which probably added little to his cheer when he found that this last expedition was destined to accomplish nothing. Farrow, by this time, was making his final roundup of the Sheepeaters far to the east. Bernard's troop ended its useless march October 5th.

The troop remained at Boise Barracks during the winter. In April it changed station to Fort McDermit, Nevada.

X

THE CHASE OF THE CHIRICAHUAS*

The Sheepeater Campaign, arduous as it had been, added no battle, fight or "scrimmage" to Bernard's list, which had reached No. 101 at the close of the Bannock War in 1878 and was not to be completed by Numbers 102 and 103 until 1881 in the familiar field of Arizona.

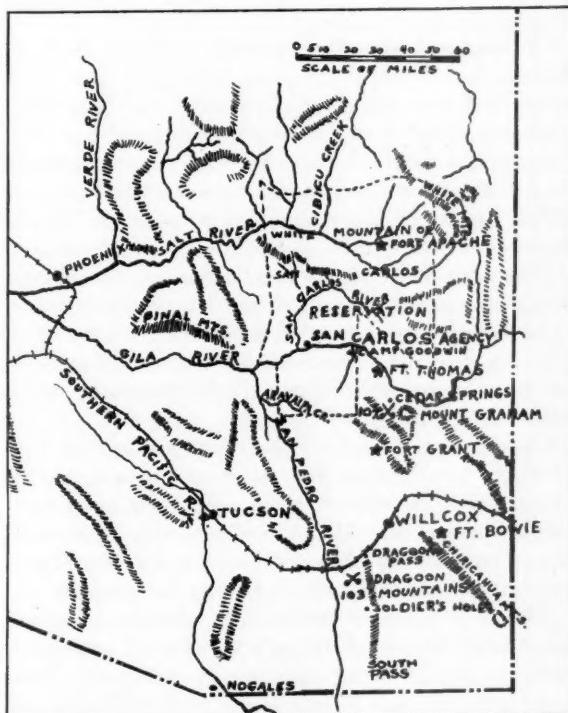
The year 1880 was passed very quietly at the desolate post of Fort McDermit. On Christmas Day, in this isolated spot, was born his seventh child, Thomas Pitcher Bernard, now a colonel of Field Artillery. The middle name honored the second lieutenant who had proved so able an officer in Idaho and Oregon.

An unimportant scout of two hundred and twenty

*BIBLIOGRAPHY: "A Cavalry Horse of Ye Olden Days," by C. B. Hardin in *Winners of the West*, June 30, 1933; *Geronimo's Story of His Life*, taken down and edited by S. M. Barrett (New York, 1906); *The Truth About Geronimo*, by Britton Davis (New Haven, 1929); *Lieutenant Charles B. Gatewood and the Surrender of Geronimo*, by Maj. C. B. Gatewood, Order of Indian Wars of the United States, Jan. 26, 1929; *Trailing Geronimo*, by Anton Mazzanovich (Los Angeles, 1926).

miles was made by Company G in July of 1881. All was quiet in the northwest, and it seemed that the usual summer campaign was over. But far away in Arizona the Apaches were stirring. A medicine man of the White Mountain sub-tribe was causing trouble near Fort Apache. An attempt to arrest him August 30th resulted in an uprising of the White Mountain Apaches and a mutiny of Indian Scouts. Captain Edmund C. Hentig of the Sixth Cavalry and several of his men were killed. Brevet Major General O. B. Willcox, commanding the department, felt that he had no troops that could be spared from garrisons to send to the scene of the Cibicu battle. He asked that assistance be sent from neighboring commands.

There were a large number of companies within a radius of one thousand miles from the San Carlos Reser-



SOUTHEASTERN ARIZONA. Showing scene of Bernard's 1881 campaign and locations of his fights Nos. 102 and 103.

(Based on contemporary maps.)

vation. Few of them were especially busy. But from them all the troop of Colonel Bernard, far north in Nevada, almost on the Idaho line, was selected. Perhaps it was thought that he would get there first.

On the morning of September 4th, five days after the killing of Captain Hentig, Corporal Luther A. Secor, later Bernard's first sergeant, was on herd guard in a canyon north of Fort McDermit. At noon he sent two men into the post for dinner. They came galloping back with orders to bring in the stock and get ready to move. When the animals arrived the troopers were ready to saddle up, and within a half hour the company was on

its way without waiting for rations or transportation. All that afternoon and far into the night they rode, to within twelve miles of Winnemucca. As usual Bernard was a bit too precipitate for the somewhat orderly army manner of doing things "immediately." The railway cars that were to carry the troop to "somewhere in Arizona" would not arrive until the following afternoon. The next day the eighty mile march was completed, the troopers were given a meal at a hotel, the animals were loaded and the company sat down to await the arrival of Company I. In the course of the afternoon Company I's train arrived, and the two troops were on their way, down through Nevada and California and into Arizona, by way of Truckee, Sacramento, and Lathrop. Troops moving by railroad were no common sight during the Indian wars, but Bernard was to prove the value of speedy transportation even further before the campaign was over.

On the fourth day the two troops arrived at Willcox, Arizona, and unloaded. Wagons, mule teams and travel rations had been picked up along the way. That afternoon they marched to Fort Grant, the next day to Fort Thomas, and the third day to San Carlos Agency, where the trouble centered. A pack train was acquired here, and within two weeks of receiving orders in far off Nevada they were scouting in the White Mountains of Arizona. Within a few days they ran into the band of Indians who were the objects of this long chase. Thirty warriors, with a number of women, surrendered without a fight. The prisoners were taken to San Carlos, placed in wagons in irons, and started for Willcox with the two troops, under Major George B. Sanford, as escort.

On the first day of October they marched to Fort Thomas. On the next day, while on the way to Fort Grant, a courier overtook them about four miles from Cedar Springs, near Mount Graham, with information that three hundred Apaches had left the San Carlos Agency with the intention of rescuing the prisoners.

This band proved to be Chiricahua Apaches, who had killed Chief Sterling of the agency police at Camp Goodwin, and were now definitely on the war path. Their hereditary chief was Nahche—also written Nachez and Nachite—who was the son of Cochise, Bernard's enemy of 1869 and 1870. But Nahche had little of the ability of his father, and another chief, Juh, disputed the leadership. A rival of Juh at this time, later to become the last of the famous Indian chiefs, was a warrior of less than sub-chief's rank, who by sheer courage and determination dominated the history of the Apache Wars. He was Geronimo, at this time notable only because of an arrest for murder in 1877 and subsequent escape on a raiding expedition into Mexico. But already in 1881 he was disputing the leadership with Juh, and had a following of a considerable number of Chiricahuas. The reason for the outbreak of October, 1881, is given by General Willcox as the refusal of the agent to help Juh and Nahche in constructing an irrigation ditch. Geronimo probably was not much interested in that problem. He

was interested in maintaining his independence of Juh, so kept "Geronimo's band" on the reservation—for the time being.

Shortly after the courier delivered his message, the two troops of the First Cavalry sighted the Chiricahuas. The wagons were formed in two lines, with the cavalry horses, in charge of the Number Fours, in between the two lines, while the dismounted troopers formed skirmish lines around the wagon train. In this formation the Apaches were held at a safe distance for about an hour, when Companies A and F of the Sixth Cavalry, under Lieutenants G. E. Overton and J. N. Glass arrived to help out. Overton's company deployed, dismounted, as soon as it came under fire, and Bernard now mounted his troop and charged. As soon as the two companies made a junction, the Apaches began to leave, but Bernard continued after them into the hills. There, at about 8 o'clock, the Indians made a determined effort to drive Bernard back, firing seven volleys and approaching within ten feet of his men—unusually close for Apache warfare, for these Indians were more notable in ambush than in charges. But Company G held its ground and drove the Apaches back, returning to the wagons only when darkness made it impossible to see anything of the hostiles. In this fight of October 2d a sergeant of Company F of the Sixth Cavalry was killed. Two of Bernard's men were wounded.

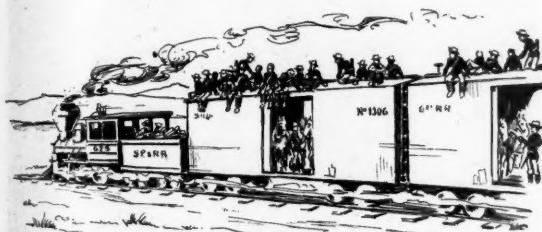
Fort Grant was reached that night. The next morning the two troops of the Sixth Cavalry took up the pursuit of the Indians, while the two of the First took the prisoners to Willcox and turned them over to a company of Infantry there. In the afternoon the troops of the Sixth came in to report that the Indians were headed for the Dragoon Mountains, a range running north and south not far from the Mexican line. That night Companies F and H of the Ninth Cavalry, a colored organization then, as it is now, arrived at Willcox by train from Texas.

The morning of October 4th a dramatic chase began. Colonel Bernard was given command of the six troops from three regiments. His first act was to commandeer a railroad train for the chase—a most original idea in Indian warfare. The horses and pack mules were loaded into box cars, but most of the men clung to the tops of the cars. After several miles of this precarious and uncomfortable transportation, the Indians were sighted crossing the track some four or five miles ahead, near the Dragoon Pass. Gallantly the puffing little wide-funnelled locomotive speeded for the spot and stopped. Doors of the box cars were lifted off their hangers and used for gangways, the horses were hastily unloaded, and the men mounted, and were off in pursuit.

"We formed left front into line, with two-yard intervals, First Cavalry on the right, Sixth on the left, and Ninth in center," says Sergeant Secor. "Then, advancing at a gallop, we commenced firing. The Indians would make a stand on every high elevation, trying to hold us in check. This they did to some extent, but we

would soon outflank them, and then they would beat it. This was kept up for from twenty to twenty-five miles. Then they turned into the mountains, at a very bad, rocky place, and we had to dismount to fight on foot."

At this point some twenty or thirty of the Apaches were separated from the main body, and against these Lieutenant Pitcher charged with a platoon of about twenty men from Troop G, and drove this band into the mountains. But as soon as the Apaches reached the rocks they were able to take positions from which they could hold the troopers at bay. Soon after dark Bernard took Troop G on a roundabout course of about five miles through a pass, in an attempt to cut off the Indians, but



The horses and pack mules were loaded into box cars.

his troop arrived too late. Already the Chiricahuas had escaped.

The next morning Bernard continued the pursuit, sending back word from Soldier's Hole at the south end of the Dragoon Mountains that the Apaches apparently were headed for Mexico and that he would follow them if he did not receive orders to the contrary. At this time there existed an agreement with Mexico permitting troops of either nationality to cross the international boundary after hostile bands under certain conditions, but it never was entirely clear just what those conditions were, and such invasions on the part of United States troops usually brought forth some objection from Mexico. General Willcox referred Bernard's communication through military channels, and presumably it eventually was referred by the War Department to the State Department, and what happened to it after that General Willcox did not know at the time he made his annual report for that year to the War Department. Meanwhile, of course, Bernard's command invaded Mexico, and, in fact was on its way back because of lack of rations when orders finally reached the colonel for his return.

Juh and Nahche had visited the mountains of Chihuahua before and were out of sight soon after Bernard crossed the border. The six troops had very few provisions when they started out, and these were soon exhausted, so Bernard was forced to give up the chase. Juh had a small personal celebration in honor of his escape, and while drunk fell into a river and was drowned. In April, 1882, Geronimo led out his small band and joined Nahche. They were persuaded to return to the reservation two years later, Geronimo bringing with him a large

herd of cattle that he had collected from Mexican ranches. The United States paid the looted Mexicans for Geronimo's cattle, and then confiscated the herd for the use of the reservation. This was one of the causes for Geronimo's final and most famous outbreak, when five thousand regular troops were used in the effort to run down his small band.

But Bernard had completed his one hundred and three battles with the affair at the South Pass of the Dragoon Mountains, October 4, 1881. After the return of the troop from Mexico—and from this time it was reported officially as a "Troop" and not a "Company" although general orders to this effect were not issued until 1883—it was stationed for a time at its old post of Fort Bowie, and then went back, in November, to Fort McDermitt. The following spring it returned to another familiar post, Fort Bidwell.

Here, November 1, 1882, Bernard ended his career in the First Cavalry. On this date he was promoted to be major in the Eighth Cavalry. For twenty-seven years he had been in the same regiment, in every grade from recruit and blacksmith to captain and brevet colonel. For fourteen years he had commanded Company G; for sixteen years he had been a captain.

The Indian wars were drawing near their close. In the decade from 1880 to 1890 there was a sharp drop in the number of skirmishes and expeditions. Geronimo was carrying on the campaign that made him the last of famous Indian chiefs, and Sitting Bull of the Sioux was to meet death in one final outbreak to the north. But settlement was rapidly closing in and in 1890 the "Frontier Line" disappeared from the maps. But this decade was the flower of the range cattle industry when the wild west of the cowboy was stamping itself upon the national consciousness, to be subject matter for thousands of novels, short stories, plays and motion pictures. Abilene, Tombstone and Deadwood and a hundred more had their day of shootings and cussedness, bringing to the fore the names of "Wild Bill" Hickok, Wyatt Earp, "Calamity Jane" and a host of other frontier characters.

Laredo, Texas, also had its day of wild and woolly west-ness, and its day was election day in 1886. Local political parties styling themselves "Batas" and "Guaraches" had worked up a bitter feud and there was every indication of bloodshed before the day was over. As was not unusual in the West, sheriff and city marshal headed the opposing factions. As early as 7:30 in the morning sounds arose from downtown Laredo that resembled an old-fashioned Fourth of July celebration. But the noise came not from firecrackers, but from pistols.

Fort McIntosh, nearby, was commanded by Major Reuben F. Bernard of the Eighth Cavalry, who had as garrison Troop A of his regiment and Companies D and E of the Sixteenth Infantry. There was no occasion for him to leave the confines of the military reservation. If he did intervene there was very little chance that he would get any thanks for it from anyone, and a very strong possibility that he would face a court martial for

an unwarranted invasion of the rights of citizens without authority.

But Bernard could not be kept out of a fight, if he thought there was any possibility of his doing it any good. Legalistic arguments had no appeal for him. Here was something going on that he thought he should stop. To his mind it was the primary duty of the army to preserve the peace.

When the firing started, an officer was sent to the town to find out what was going on. The officer returned and reported that there was firing from house tops and from around corners on everyone that appeared in the streets, and that some twenty persons had been killed. Bernard had "To Arms" sounded, calling out his garrison. Then it was reported to him that armed parties from Mexico were crossing the Rio Grande river into the town to take part in the fight.

"That's what I've been waiting for," he exclaimed. "Now we'll go in and stop it."

He ordered his Cavalry troop to remain under arms near the reservation gate, to be ready to move when ordered. He then formed his two companies of Infantry in column of fours, and led them into the town. Without looking to the right or left he marched his command down the street along which most of the fighting was going on. As the troops appeared the fighting stopped, to be resumed again as soon as they had passed. The infantry paid no attention to this, but continued the march until the city hall was reached. There it was halted.

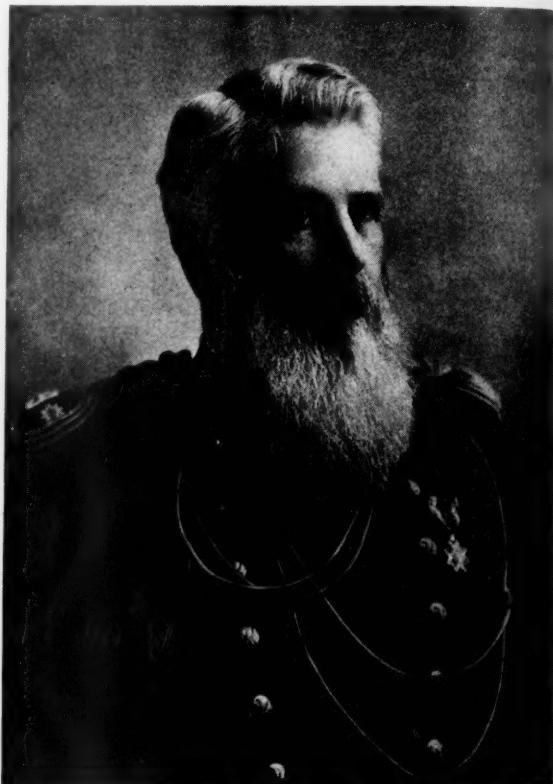
Bernard then sent for the sheriff and the city marshal and informed them that he had taken charge of the town. All firing must cease immediately, and all firearms must be brought to the city hall and surrendered to the troops. The leaders of both factions agreed to this program. An army ambulance was soon filled with pistols, shotguns, rifles and other arms. Patrols were sent out and all citizens appearing on the streets were searched for arms. All saloons were arbitrarily closed. Sentries were posted at the post office, custom house and banks. After noon business houses began to re-open, reassured by the constant patrolling of the streets by squads of soldiers. Orders were issued that no one was to appear on the streets after dark unless supplied with a pass signed by military authorities. Patrols enforced these orders during the night.

Now came the time for explanations. With no authority from anyone Bernard had invaded a city and declared martial law. He reported his action by telegraph to the adjutant general of the department at San Antonio, setting forth that there was no civil authority to take charge and stop the riot, since city and county authorities were opposing each other, that armed parties from Mexico were joining in the fighting, and that the custom house and post office were exposed to looting. There had been no time to inform department headquarters or await orders.

However there were no complaints from any quarter. Both political parties agreed in thanking Bernard for his

prompt action. Citizens were grateful. The state had no complaint. From army superiors came nothing but praise and general orders of the army mentioned among those who distinguished themselves by especially meritorious acts or conduct, Major Bernard "for the promptness and discretion with which he suppressed a dangerous riot in Laredo, Texas."* Rare judgment must have been exemplified to meet such universal commendation.

Bernard received his long delayed brevet as brigadier general in 1890. Two years later he was promoted lieu-



Lieutenant Colonel Reuben F. Bernard, 9th Cavalry.
Taken about 1892.

tenant colonel of the Ninth Cavalry. He retired October 14, 1896. His wife died in 1891. He was married a second time, after a year's interval, to Ruth Lavinia Simpson at Baltimore, Maryland. She died within a year, shortly after giving birth to a son, Robert Simpson Bernard now resident of Baltimore. General Bernard was married a third time, shortly after his retirement, to Elzie May Camp at Knoxville, Tennessee, his boyhood home.

General Bernard was Deputy Governor of the Soldiers' Home at Washington, D. C. from 1896 until shortly before his death. He was first president of the Order of Indian Wars and retained that office six years. He died November 17, 1903.

With his death there passed a master of minor warfare. For leadership in the troop or battalion operations

that were characteristic of the campaigns against the Indians, he was one of the most efficient Cavalry officers carried on the rolls of the army during his long period of gallant and arduous service. In the larger field of generalship he was untested. But as captain of a troop in active campaign he ranked not far from first.

THE END

Appendix

Numerical and Chronological List of General Bernard's Fights and Scrimmages.

<i>New Mexico</i>			
1. Headwater of Gila River (D, 1st Cavalry)	1856 March 28	57. Near Front Royal	September 26
2. On the Mimbres River	April 5 1858	58. In Luray Valley	September 27
<i>Arizona</i>		59. Near Staunton	September 29
3. In Pinal Mountains	December 25	60. Waynesboro	September 30
4. San Carlos River	December 27	61. Rapidan River	December 22
5. Pinal Mountains	December 30 1859	62. Warrenton	December 25
6. On San Pedro River	November 9 1860	63. Snicker's Gap	December 27 1865
7. Near Fort Buchanan	January 20 1861	64. Bunker's Hill	January 20
8. San Carlos River <i>New Mexico</i>	January 21 1862	65. Near Mount Jackson	March 3
9. Near Fort Craig	February 19	66. Near Staunton	March 5
10. Valverde	February 21	67. Waynesboro (1st Cavalry, Commanding Regiment)	March 6
11. In mountains near Socorro	February 26	68. South Anna Bridge	March 12
12. Apache Canon	March 28	69. White House Landing	March 15
13. Pigeon's Ranch or Glorieta	March 30	70. On Chickahominy River	March 16
14. Albuquerque	April 25	71. On road to Dinwiddie C. H.	March 29
15. Peralto <i>Virginia</i>	April 27 1863	72. White Oak Road	March 30
16. Near Culpeper (I, 1st Cavalry, Commanding)	November 5	73. At Dinwiddie Court House	March 31
17. Stevensburg	November 8	74. Five Forks	April 1
18. Mine Run	November 26 1864	75. Scott's Cross Roads	April 2
19. Barnett's Ford	February 8	76. Drummond's Mills	April 4
20. Near Charlottesville	March 10	77. Sailor's Creek	April 6
21. On Rapidan River	March 11	78. Near Sailor's Creek	April 7
22. Todd's Tavern (Brevet captain) (wounded)	May 6	79. Near Appomattox Court House	April 8
23. Spotsylvania Court House	May 7	80. Appomattox Court House <i>Oregon</i>	April 9 1866
24. On the road to Beaver Dam	May 10	81. Rattlesnake Creek <i>Arizona</i>	July 26 1869
25. At Beaver Dam	May 10	82. In Aravaipa Mountains (G, 1st Cavalry, Captain)	February 5
26. On the road to Yellow Tavern	May 10	83. On San Carlos River	March 19
27. Yellow Tavern	May 11	84. On headwaters of San Carlos River	March 19
28. At Meadow Bridge	May 12	85. In Pinal Mountains	March 19
29. After passing Meadow Bridge	May 13	86. In Burro Mountains	July 4
30. Tunstall's Station	May 14	87. Chiricahua Pass (Brevet Brigadier General)	October 20
31. Tunstall's Station	May 15	88. In Chiricahua Mountains	October 27
32. While crossing Mattaponi River	May 27	89. In Chiricahua Mountains	October 31
33. Hawe's Shop	May 28	90. In Dragoon Mountains	1870
34. Old Church	May 30	91. In Dragoon Mountains	January 27
35. Cold Harbor (engagement)	May 31	92. In Pinal Mountains <i>California</i>	January 28
36. Cold Harbor (battle)	June 1	93. At Land's Ranch, Tule Lake	1871
37. Chickahominy River	June 2	94. In Lava Beds, Tule Lake (D, G 1st Cavalry, Commanding Battalion)	January 1 1872
38. Trevilian Station	June 11, 12	95. In Lava Beds, Tule Lake	December 21
39. White House Landing	June 17	96. Between Tule Lake and Applegate's Ranch	1873
40. Chickahominy River	June 18	97. In Lava Beds, Tule Lake	January 16
41. Deep Bottom	June 27	98. In Lava Beds, Tule Lake <i>Oregon</i>	January 17
42. Darby's Farm	June 28	99. Silver Creek (A, F, G, L, 1st Cavalry, Commanding, Brevet Brigadier General)	January 22
43. Berryville	August 10	100. Birch Creek (A, E, F, G, H, K, L, 1st Cavalry Commanding, Brevet Brigadier General)	April 13
44. Stone Church	August 10	101. North Fork of John Day's River (G, 1st Cavalry) <i>Arizona</i>	April 14
45. New Town	August 11	102. Cedar Springs, Mount Graham	1878
46. Near Winchester	August 12	103. South Pass of Dragoon Mountains	June 23
47. Near Front Royal	August 13		July 8
48. Shepherdstown	August 25		July 20
49. Smithfield (Brevet Major)	August 28		1881
50. Smithfield	August 29		October 2
51. Near Halltown	September 1		October 4
52. Berryville	September 5		
53. Opequan Creek	September 15		
54. Winchester	September 19		
55. Cedarville	September 23		
56. Luray Valley	September 25		

The 1936 Cavalry Rifle Team

By CAPTAIN THOMAS J. HEAVEY, 3D CAVALRY,
1936 TEAM CAPTAIN

THE United States Cavalry will participate in the National Rifle and Pistol Matches in the early part of September this year. The past records of these contests show that the Cavalry has seldom reached the top in these matches. However, this is not any disparagement of the efforts of the previous teams, team captains, or coaches, for a team that wins a National Rifle or Pistol Match has won a victory under competitive conditions that only those who have been through the mill can understand. In many instances, the competition had an additional handicap in so far as equipment was concerned.

It appears that for the first time in many years the service teams will be on a more equal footing, as the War Department has seen fit to allocate a reasonable amount of funds for the proper equipment of all such teams. In addition to this most important material aid, a considerable increase in ammunition allowances for the competitors in the tryouts and in the amount of money available for travel pay to competitors for the service squads will be available. Under these circumstances, there does not seem to be any possible alibi for the service teams in the 1936 match, if the best available officers and men are permitted to carry on.

Although not axiomatic, and in some cases admittedly false, the author feels that the skillful rifle or pistol shot *per se* must be a good soldier. Let us grant that those shots who do not fill the shoes of a good soldier are the exceptions that prove my general statement. It is difficult to release a good soldier for other duties. Summer training, maneuvers, and the normal activities of our regiments during the period of time that must be devoted to grooming our men up to the perfection demanded of Perry conditions, all too frequently cause us to keep good men from competing, hoping that the team officials can find someone else to take their places. I candidly admit that I have been guilty of such action, so I trust that the shoe does not fit too tightly on some readers.

But the making of a rifle shot able to render a creditable showing as a member of the Cavalry Rifle Team in the National Matches is not a simple problem of a few months concentrated effort by the team officials. He must be above average ability to start with, and experience under competitive conditions is, if not essential, certainly most advisable. Admittedly a few dark horses win races. But if one should add up the winnings of these outsiders and compare them with the winnings of those horses that run true to form, and have been in training more than one season, the dark horse is usually not seriously of greater value than the handicapper's guess. Tried and experienced rifle and pistol shots can not be replaced by green newcomers, with any great

chance of success for a team. It is not a question of finding the natural superman and giving him a shot in the arm at the last minute to keep him from getting the buck. It is a problem of finding the prospects, inducing them to learn how to pick up their front feet over the low jumps, getting them well muscled, and then pushing them along as fast as they can do the job. We rarely find a horse that can go the Olympic course, or the Grand National, clean with only a few months' intensive training.

For the general knowledge of the reader, it is true that in the National Matches the service teams are required to fire fifty per cent *men who have not fired in any National Match previously*. The remaining members of the team of ten shooters *may* have fired previously. But these rules do not preclude using as a shooting member a shot who has fired in any of the *other* rifle matches conducted at Camp Perry, and there are some twenty-odd other matches conducted under similar conditions. The only way in the world to train the shooter as he should be tried is to put him in these other matches for at least one or possibly two years, prior to using him as a new shot on the service team in the National Matches. This is mentioned as an argument to keep the team officials in touch with those shots who have previously come to the tryouts and have returned to their regiments without having made the team. There are many fine shots of this category in our regiments today. It is hoped that they will be encouraged to keep on the ball.

Present plans indicate that the team squad will assemble at Erie Proving Grounds, adjacent to Camp Perry, for training, on or about June 10th. It is hoped that approximately 60 candidates may be sent, four or more from each regiment. In some cases, due to summer activities, it may be necessary to permit candidates from regiments to report later than June 10th. The detail of officer personnel, particularly the younger officers, is urgently desired. It is an excellent tour of training for them and we must look forward to future years when they must carry on. Old eyes do not win National Matches.

Letters of instruction covering the details of regimental tryouts will be forwarded to regimental and separate unit commanders shortly. It is but fitting that the following letter of General Malin Craig, Chief of Staff, himself a coach and shooting member of the 1907 United States Cavalry Team, addressed to all Corps Area Commanders under date of February 17, 1936, be added:

"1. To insure that the Infantry, Cavalry and Engineer teams make a creditable showing in the 1936 National Matches, it is necessary that the best qualified candidates be developed and made available for the tryouts for the teams.

"2. I should like to have all commanders concerned informed of my personal interest in this matter."

Mobilization Test of Provisional Troop, 8th Cavalry

BY CAPTAIN WESLEY W. YALE, 1st Cavalry Division

FORT BLISS recently witnessed the close of one of the most interesting training experiments ever conducted. The amazing results obtained will go far towards a complete revision of our ideas of the length of time needed to mobilize Cavalry private soldiers in future emergencies, and will at once increase the importance of reserve and inactive Cavalry units in our present mobilization plans.

Briefly stated, a war strength troop of Cavalry was formed under simulated mobilization conditions by expanding the regular training cadre of one officer and thirteen enlisted men. Reserve officers, in groups of four, were detailed to serve with this provisional troop during each of the three two-week periods of the test. One hundred and seven recruits were assembled, without, however, any attempt at special selection being made. One hundred remounts were delivered by the Fort Reno depot. The object of the test was to determine the practicability of training green men and green horses simultaneously and to such a degree that they would be able satisfactorily to take the field as a combat troop at the end of six weeks' intensive instruction.

The instruction of this troop covered the broader aspects of training and differed in no way from the training methods which have been in effect in the Cavalry Division for some time and which have been applied in detail by the Division Commander, Brigadier General Hamilton S. Hawkins, to the training of smaller groups of recruits.

At Fort Bliss there is no idea of turning out perfect soldiers in a few days' time. The basic idea is simply to recognize that the expansion of our Army will, in all probability, be an "emergency" and to use the limited training time available in concentrating the citizen soldier upon *essential* combat training.

The essentials of training for Cavalry involve both individual and collective training, although, on certain lines, the two types merge. Individual training will include physical conditioning, the care and use of weapons, digging of hasty entrenchments, instruction in the use of cover, and the development of a cheerful obedience to orders. But physical conditioning, for example, will be sought as a corollary to other drills, leaving actual calisthenics to be considered among the lesser essentials. Likewise classed with the lesser or non-essentials are intensive close order, or barracksquare drill, the manual of arms, the facings, interior guard duty, etc. Essential collective training involves:

- Marching, including defense against air attack,
- Camping, with emphasis on concealment from the air,

Attack against indicated objectives,
Occupation of a defensive position,
Gas defense,
Construction of hasty entrenchments,
Instruction in minor command post duties,
For Cavalry, a fair proficiency in equitation as applied to the foregoing exercises and to the use of arms.

Of course, any unit or individual well trained in the above would be a most potent member of the combat team. But perfection is neither sought nor expected. The recruit gets acquainted with his weapons in the first few days of his service. Within the first ten days he participates in one or more combat exercises which teach him the use of cover.

Lesser essentials are by no means ignored. Short periods of close order drill, without insistence on precision, serve as a preparation for the same movements mounted and also assist squad leaders in "getting the feel" of command. Nomenclature of weapons and other allied subjects are not scheduled for drill periods but are taught during rests at other drills. Thus, while the soldier is learning the basic essentials of combat duties, the informal instruction in lesser essentials is going on at odd times with the result that if training goes on for six weeks or longer it is quite possible to turn out very good soldiers. At this juncture, however, it should be thoroughly understood that no claims are made for these men to be "forty-five day wonders." They are simply individuals who have received a varied amount of training and who can be considered as satisfactory for emergency field service. In some cases the law of averages works to produce an exceptional man.

A request was forwarded to the War Department for



Second week of recruit training

permission to hold the mobilization test, setting M-day as the 1st of January. Final approval was received the latter part of December carrying with it the authority for the assembly of the one hundred and seven recruits and the delivery of the one hundred remounts. It was realized that the few days available before M-day gave very little time for the vast amount of detail involved in drawing equipment, unloading remounts and processing recruits.

To the 8th Cavalry was assigned the tasks incident to the sponsoring of the troop which became known as the Provisional Troop, 8th Cavalry. These tasks included the equipping of a separate set of barracks, separate stables and stable accessories, the borrowing from permanent troops of many articles on the tables of basic allowances which could not be supplied by the Quartermaster, and the assembly and preparation of the twenty odd types of blank forms which are required in the administration of a modern troop.

It was readily foreseen that the details of an administrative nature incident to the reception of the men and animals would amount to as much, if not more actual work than the training with which the test was primarily concerned. There were many artificialities, such as the restriction of the Reserve officers to two weeks of training, which operated to make the test more difficult than if real wartime conditions prevailed.

Consideration of such factors which were aside from the purely training nature of the test led the Division Commander to inject other artificialities designed to simulate war conditions more closely.

Firstly, it was decided to place a specially selected officer in charge of the troop. Secondly, a specially selected field officer was designated to assist the troop commander by advising him from time to time on the general aspect of training progress, where the troop commander might become involved with details. Thirdly, two regular 2d lieutenants were assigned for administrative purposes and for occasional advice to Reserve officers. After weighing these considerations, it was decided to place Captain John L. Ballantyne in charge of the troop. Major Charles S. Kilburn was selected as supervisory field officer, and Lieutenants Joseph A. Cleary and David V. Adamson were detailed as administrative assistants.

The recruits were assembled by the Dallas and El Paso recruiting offices and, as a whole, were a credit to the southwestern states from which they were drawn. They corresponded to the volunteers with which Regular Army cadres might be expected to expand in an emergency. About twenty five per cent had had previous experience with horses, probably a higher percentage than could be expected in other sections of the United States.

The horses began to arrive in carloads of twenty each a few days before M-day. Each car was unloaded by the cadre and the animals taken to a convenient Hitchcock pen where they were allowed to mill around so that the more docile could be singled out. All of the early arrivals were ridden by Captain Ballantyne or members of

the cadre and notes were made of the characteristics of each animal prior to the start of the test.

On M-day only sixty of the one hundred remounts had been delivered. A few days passed before it was learned that the remainder would not arrive until about January 17th. The date of M-day was, therefore, changed to January 6th and the absent remounts supple-



Recruits and remounts early in the training.

mented with old horses borrowed from the permanent troops of the 8th Cavalry. At first glance this substitution would appear to be an aid to early training. Actually, since the remaining remounts arrived prior to the tenth training day, it was a distinct setback because it was necessary to have forty recruits go back to the beginning in conditioning and gentling horses, thus losing a corresponding amount of training time. In this connection, however, all men took their first Government ride on a remount.

The training cadre of a Cavalry troop consists of thirteen enlisted men whose duties are divided as follows:

1 sergeant—Acting 1st sergeant (Sgt. A. J. Goodreau)

2 sergeants—Acting platoon leaders (Sgt. R. T. Vona, Sgt. W. J. Bretton)

2 corporals—Acting platoon leaders (Cpl. J. Rogers, Cpl. A. Sanders)

1 sergeant—Acting stable sergeant (Sgt. E. C. Heinrich)

1 corporal—Horseshoer—stable orderly (Cpl. C. Thomas)

1 pvt. 1st Cl.—Horseshoer (Pfc. C. Hall)

1 corporal—Acting mess sergeant (Cpl. J. F. Kennedy)

2 privates—Cooks (Pfc. L. C. Doughty, Pfc. C. G. Coleman)

1 private—Acting supply sergeant (Pfc. W. Fishman)

1 corporal—Troop clerk (Cpl. G. H. Hilderbrand)

It is apparent that of these men, the Stable Sergeant, Mess Sergeant, Supply Sergeant, Cooks, Horseshoers, Troop Clerk, and 1st Sergeant are entirely or partially concerned with administrative details and in most cases cannot be counted upon to assist in training. Therefore,

for the purposes for which the test was intended, only five or six men are available as assistants.

Major Kilburn and Captain Ballantyne had submitted a training schedule which was prepared in accordance with the principles and policies already described. It is recognized in the Cavalry Division that such schedules are tentative only and may be departed from when the occasion warrants. But while there were slight variations from schedule, the troop kept abreast of weekly objectives at all times. Provision was made for inspections by the Commanding General on the Saturday morning which closed each two-week period of instruction.

The first two weeks of training included two afternoons of preliminary rifle marksmanship; two afternoons of firing .22 cal. rifle and machine gun on the gallery range; one afternoon of preliminary pistol (dismounted); one day of firing rifle, pistol and light machine gun on the range, and a short practice march of about twelve miles. The schedule was arranged so that there would be two short periods of mounted work daily, increasing gradually in length, with the object of improving the condition of animals and of devoting the maximum time available to handling and gentling. Riders and mounts were thus given the greatest opportunity for mutual understanding.

A retreat formation was held four times weekly in blouses, at which the men put up a surprisingly fine showing. All clothing and equipment had been drawn at the same time which resulted in a uniform appearance, unusual in permanent organizations.

As a general rule the day began with dismounted work, explanation of the dismounted formations and their relations to the mounted drill. At all times, officer and non-commissioned officer instructors refrained from the hard-boiled methods sometimes used formerly by drill sergeants with the result that the work proceeded quietly and without loss of patience. This attitude had a particularly telling effect when handling the horses and was probably responsible for the entire test being carried out without injury worth mentioning to man or beast.

The troop was organized on the basis of classification of remounts. That is, fractious animals were assigned to one platoon and the men with previous riding experience were assigned to these horses. Quieter horses went to the Machine Gun Platoon. The larger sized men were given machine gun duties except where such men had had previous riding experience and were thought to be more valuable elsewhere. Needless to say, quiet horses and inexperienced men started their Army careers together.

The Remount Service had done itself proud by proving that it could, on short notice, ship high class horses in good condition. With but few exceptions the remounts proved amazingly docile. The few animals who were not up to the average in condition were assigned to the same platoon. All horses were probably in much better condition and temper than could be expected of wartime allotments, but it should be recorded that the Fort Reno

Depot met this particular situation in a splendid manner.

The initial periods of training came during very cold weather, which naturally increased the troubles of all concerned. But the troop was able to take a short cross-country ride on the very first day of training and only eleven men reported saddle stiffness upon the return to stables. These men kept on schedule without recourse to



TRAINING DURING THIRD WEEK

the sick book, however. On the fourth morning the men were given short gallops for the first time, but the mounted work was conducted for the greater part at the walk and the trot.

On the third afternoon rifles were carried mounted and a short practice march of about five miles made. On the fifth day the men turned out full pack and on the next day a slightly longer practice march was made in full pack.

The seventh day saw the schedule partly disrupted by the arrival of another car of remounts. These horses were fully up to the quality standard established by the first sixty. The recruits who were to be assigned to this shipment turned back to the 8th Cavalry any old horses they had been riding and assisted in the unloading of the car. At the close of the same afternoon fifty per cent of the animals were being ridden in ranks although, of course, separated from the rest of the troop. Following the practice in handling earlier arrivals the horses were put in a Hitchcock pen and allowed to mill about. The more docile were selected for immediate riding by the recruits and the others were ridden during the same afternoon by either Captain Ballantyne or a member of the cadre. The final shipment arrived during the third week of training and was similarly handled.

On the 8th day the men were given the double rein on the snaffle bit. The Machine Gun Platoon was formed on this day, which, with the previous experience in handling weapons, completed the familiarization of the men with their arms. All of the newly arrived remounts had joined their fellows in regular troop drills by the ninth day and took part in the practice march and patrol work scheduled for that time. From the tenth day on, the Machine Gun Platoon was given instruction apart from the other platoons, and, for the first time, combat formations cross country were taken up at the gallop instead of at the slower gaits.

The eleventh day was entirely devoted to range practice, with the following results:

All men fired 5 rounds with pistol, L targets, 15 and 20 yards range; and with rifles on 26 E targets at 200 yards:

The M.G. Platoon of 26 men scored 69 hits on 26 targets (130 rounds)

The 1st Platoon of 26 men scored 59 hits on 26 targets (130 rounds)

The 2d Platoon of 26 men scored 61 hits on 24 targets (130 rounds)

The 3d Platoon of 26 men scored 39 hits on 22 targets (122 rounds)

In the M.G. Platoon each man fired a belt of 20 rounds on two E targets at about 275 yards range. The average was 12.8 hits per man out of a possible 20.

The Commanding General assembled the Cavalry field officers of the garrison to watch the inspection-demonstration which was given by the troop to close the first two weeks of training. On this occasion the troop assembled mounted full pack at the stables and then moved out to the riding rings in rear of the 8th Cavalry area where each platoon went through riding hall movements on a circular track for about fifteen minutes. It was explained that this period was given daily for the purpose of warming and suppling the horses and to permit the non-commissioned officers to make needed corrections of riders' positions. The great majority of equitation instruction was, of necessity, carried on during cross-country rides and tactical drills.

At the end of this warming up period the troop assembled by platoon and then staged a very creditable troop drill at the walk and trot which involved all of the ordinary close and extended order formations. Finally, a mounted attack was executed in column of platoons, supported by the Machine Gun Platoon which had gone into action to one flank. The rally was quickly made to demonstrate the training in "bringing order out of confusion."

The inspection was very impressive from every stand-point. Among the good points noted were the smoothness with which changes in gait were executed and the manner in which recruit corporals handled their squads.

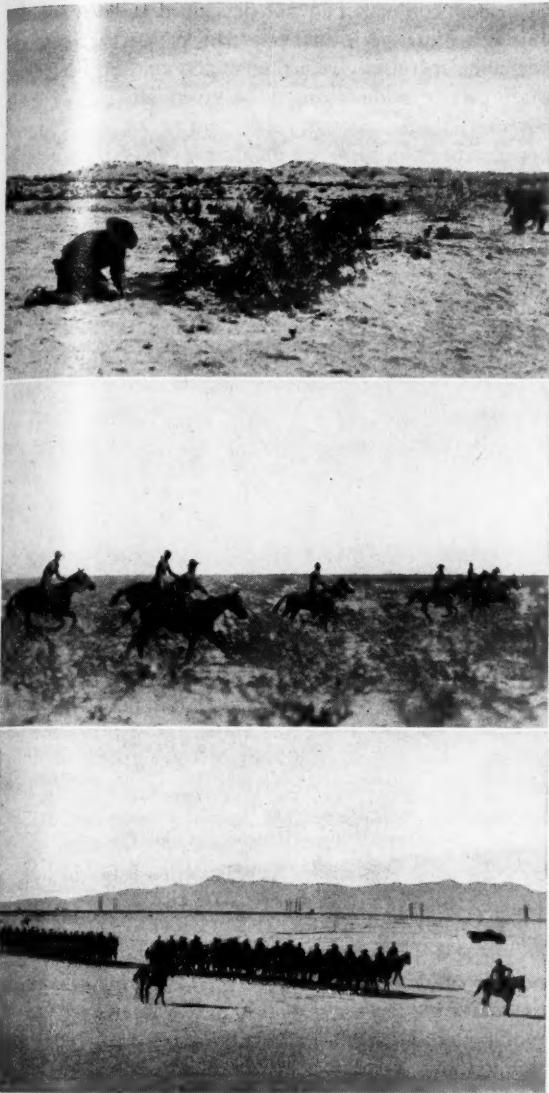
The morale of the troop continued to be more than satisfactory in spite of the long hours of drill (7:30 A.M. to 5:00 P.M.). It was evidenced in many ways such as having all men volunteer for work after inoculations and in the large number of applications received for individual riding privileges on Wednesday afternoons and on weekend holidays.

In these first two weeks the men had been given an opportunity to take part in nearly every phase of combat. But in the majority of cases, their experience had been of the sketchiest character. Control had been exercised directly from platoon leader to trooper with the squad leader doing little more than to repeat the commands of his superiors. Therefore, the succeeding weeks were marked for polishing up the various collective exercises and drills, additional individual training in the use of arms and the use of cover and, most important of all, the development of initiative and leadership on the part of the recruit acting corporals.

Intensive instruction in the latter particular had to be carried on after the scheduled drill hours. This was accomplished by non-commissioned officers' schools conducted by the troop commander and the enlisted cadre in which the general scheme was to coach the recruit squad leaders in their duties for the following day. These schools obtained excellent recruits and were a tribute not only to the fine spirit and the professional qualification of the members of the enlisted cadre but to the intelligence of their pupils as well.

In the individual training of the third and fourth weeks emphasis was placed on the use of the pistol, mounted, although instruction in the use of other arms was continued. Collective training included exercises in dismounted attack with corresponding experience in the handling of mobile led remounts. In this connection it was found that horses were finally taught to lead in fours more successfully by using halter shanks looped around the necks than by using the conventional link straps. Leadership of the acting corporals was greatly developed by exercises in patrolling for each squad, based on a simplified system of patrolling instruction worked out by General Hawkins.

The inspection-demonstration staged by the troop which closed the second training period forcibly illustrated the degree to which instruction in leadership lags



FINAL DAY

behind the steady improvement in the training of the private soldier.

This demonstration requires the troop to execute a combined attack on an outlined enemy position. The first phase showed two patrols of a squad each approaching the enemy in the regulation formation. After being fired upon, these patrols broke for cover, remained in observation for a few moments and finally raced back to the troop, which was some distance away, with the acquired enemy information. In executing these movements the squads exhibited a certain amount of slowness which was obviously attributable to the inexperience of the leaders, although the changes in formations were technically correct.

The attack was made by placing the Machine Gun Platoon in action on the flank, by dismounting two platoons for a frontal action and by causing the third pla-

toon to make a mounted flank attack coincident with the assault by the dismounted platoons. In dismounting at a distance, the recruit squad leaders failed to prevent their men from bunching. This fault was again noted in the advances under simulated enemy fire and was apparently produced by hesitation in exercising command. The advance was ordered made by infiltration but while the individuals showed skill in taking cover, too many men were permitted to move at one time.

The mounted phase of the attack was satisfactorily made although the horses were not pushed beyond a comfortable gallop.

Following the attack demonstration the entire troop was run through the mounted pistol course. This was the first time that the troopers had been called on to show their horsemanship individually to observers and on the whole they showed to good advantage. No horses got out of hand, about twenty-five per cent displayed irritation or resistances to the sound of firing, and the chief fault noted was the tendency of some animals to avoid the bit by throwing their heads in the air.

The closing days of the test were taken up by practice marches to Dona Ana Target Range and return, by combat exercises with ball ammunition at the range and by a final demonstration-inspection calculated to review the work of the entire six weeks.

The day spent at Dona Ana was taken up by a morning period of known distance firing from four positions. In the afternoon, platoon combat exercises were held with ball ammunition which were preceded in each case by mounted approach and dismounted advance under cover. The twenty-eight mile march to the range and the return therefrom were made without incident and without injury to animals or men.

The final demonstration was largely a repetition of what had gone before in the way of mounted drills. There was a noticeable improvement, however, in the handling of the squads at the faster gaits by the recruit leaders. Mounted attacks were made by pushing out the horses. The various evolutions showed considerable polish.

But it was in the demonstration of dismounted attack that the squad leaders displayed the greatest improvement. At the close of the mounted drill, which had been performed, on the main drill field, the troop was moved to the rimrock near the railroad cut where an enemy position had been outlined on what is known as Engineer Hill. In traversing the mile or so to the new location the troop put out a covering detachment which moved by the regulation system of bounds while the main body took up an approach march formation. To the observers stationed on Engineer Hill below the rimrock, the dash over the rim and into positions of concealment in intervening draws appeared to have been executed very well and without presenting men as more than very fleeting targets.

The troop dismounted and made an initial deployment under cover of a railroad spur. From then on the advance

was made by infiltration for a distance of about three hundred yards. The improvement shown by the subordinate leaders in the two weeks since the previous demonstration was very marked, and, in fact, left very little to be desired from the standpoint of squad control and individual use of cover.

Of course, the problem was a set one and left little to the initiative of acting corporals. The advance closed with an assault which, in turn, was immediately followed by hastily entrenching the position just taken.

The Commanding General officially brought the test to an end with a short congratulatory talk to the assembled troopers and officer observers.

CONCLUSIONS

The conclusions which can be drawn from an experiment of this nature, especially when a marked success has been scored, are likely to have very far reaching results. It is gratifying to know that a small group of regulars can be expanded into a war strength troop in a short space of time. Plans for meeting future emergencies can, under such a premise, be drawn to include larger forces of Cavalry than present ideas contemplate and correspondingly better results can be predicted from the use of more numerous Cavalry. But there is a very grave danger in accepting an unqualified statement that Cavalry troops can be easily trained to take the field at the end of six weeks.

The experiment was undertaken with the clear understanding that it would be honestly conducted. It is well known that such a test could be put on and deliberately made to produce whatever results might be desired by those in authority. But in this case it was felt that if sincere effort did not result in success, the Cavalry service would be better served by labelling the test a failure. So all concerned were given to understand that no stigma would be attached to such failure. However, every advantage in personnel was given to the troop by the special selection of its officers and by the selection of an excellent enlisted cadre, there being no object in deliberately courting failure by the assignment of inexperienced officers and men.

Therefore, the conclusions which have been drawn from the test must be carefully weighed with the conditions under which it was conducted. The reader is at liberty to balance these conditions against those which, in his opinion, would obtain in time of war. The conclusions follow.

1. The test proved conclusively that green men and green horses can be trained in an emergency to take the field after six weeks of training. By "in an emergency" is meant that the men would be given further training if time permitted; if not, that they could be expected to give a measure of service in supplementing the operations of regular troops. But it must be emphasized that the ability of this troop to enter a campaign immediately and to function as a unit is open to question.

2. In the opinion of the officers conducting the test,

the recruit corporals had not developed sufficient leadership and initiative to act as squad leaders without considerable supervision from their superiors. In other words, while private soldiers might be given satisfactory training in the time allotted, the training of non-commissioned officers is a matter of a much longer period. In entering a campaign, provided that early demands were not too exacting, it is probable that these men would quickly develop into satisfactory leaders.

3. At the close of the test the horses were noticeably tired. The early stages of training provided for short



ENLISTED CADRE
Provisional Troop, 8th Cavalry

SITTING (left to right): Sgt. Vona, Platoon Sgt., 2d Plat.; Sgt. Bretton, Platoon Sgt., M.G. Plat.; Sgt. Goodreau, Actg. 1st Sgt.; Sgt. Heinrich, Stable Sgt.; Corp. Rogers, Platoon Sgt., 3d Plat.; Corp. Sanders, Platoon Sgt., 1st Plat.

STANDING: Pfc. Doughty, Cook; Corp. Hildebrand, Troop Clerk; Pfc. Fishman, Actg. Supply Sgt.; Pfc. Coleman, Cook; Corp. Kennedy, Mess Sgt.; Corp. Thomas, Horseshoer and Stable Orderly; Pfc. Hall, Horseshoer.

periods of work which were gradually increased. But the necessity for using horses rather intensively in the training of the men prevented the gradual and proper conditioning of the former to the degree which was desired. As a result we had a group of animals which were sound and in fair flesh but which lacked reserve strength. It is a question how long they would have held up under campaign conditions.

4. It is believed that the test would not have succeeded without excellent officers in charge. Captain Ballantyne showed great skill in technical training and his tactful leadership produced a loyalty and attention to duty which probably was the most important factor in the results obtained. Another important item was the ability shown by Major Kilburn in coöordinating the various phases of training and in preventing over-emphasis on special lines which might have occurred where the troop commander was burdened with details.

5. Captain Ballantyne's report states that success would have been impossible without the excellent type of enlisted men which made up the cadre. As each group of Reserve officers reported for the two-week tours of duty there were periods of several days when the non-commissioned officers who were charged with training duties had

to be wholly relied upon. The importance of good mess management is of course obvious. It is doubtful that the average wartime cadre would provide an equally high-class group.

6. The necessity of relieving Reserve officers at the end of two weeks' duty precluded the forming of a fair opinion of their part in the test. As would be the case with any officer, it is virtually impossible immediately to take hold of a strange command, especially when the officer concerned is admittedly an inexperienced lieutenant. Generally, the Reserve officers were merely able to observe the drills for the first few days of their duty. In most cases, by the end of their tours, they had acclimated themselves and had assumed the full responsibility for the training of their platoons.

7. If the success of the test can be attributed to well trained instructors, it follows that only by maintaining an adequate regular army of high-class officers and men can we hope to expand successfully to war strength in an emergency. Furthermore, such personnel must have had a maximum of experience with troops as opposed to purely theoretical training.

8. The question of supplying horses for the rapid expansion of the Cavalry is one which should be properly answered by the Remount Service. The Fort Reno depot was evidently put to some trouble in obtaining the one hundred head needed for this test, as might be inferred from the fact that the fourth and fifth cars arrived from two to three weeks late. Yet, the quality of the horses and their docility were most important factors in carrying the test through without accident or injury.

9. It is believed that this test clearly showed the superiority of a system of training in which field and combat duties are emphasized over a system in which stress is laid upon so-called disciplinary drills. The discipline of the Provisional Troop was of a superior type in that no troop punishment nor other corrective measures were necessary. The military bearing and the smartness of the individual troopers was at least equal to that heretofore developed by other training methods.

10. It is believed that the physical development of the recruits was superior to that which might have been expected from routine physical drills and mass athletics.

11. It appears that the morale of the organization was not only excellent but that it was, in a large measure, responsible for the success of the test.

12. It is believed that the training cadre now provided for the mobilization of Cavalry troops is too small. Exact figures on which to base recommendations will not be available until the close of another test now being conducted by the 7th Cavalry.

In the 7th Cavalry the second test is being carried out by Major Eugene A. Regnier and Captain Robert L. Howze. It is similar in every respect to the test conducted by the 8th Cavalry except that old horses are being used. The first inspection, for example, showed approximately the same details as that of the other, troop with generally faster gaits being employed throughout.

There can be no doubt as to the soundness of a system of recruit training which emphasizes combat duties and which can be applied in an emergency to the training of a citizen army.

Horses and Motors

(The (Springfield) Illinois State Journal.)

THE horse, it appears, is far from being outmoded. Man's oldest servant of the animal creation is proving to be indispensable to the United States army, and the traditional Cavalry, used with mechanized units, is proving to be of high value.

Colonel Bruce Palmer, commanding the First Cavalry mechanized, U.S.A., at Fort Knox, Ky., a recent visitor at the Rock Island arsenal, said, in an interview in the *Argus*, that the horse is more indispensable to the army today than it ever was.

New equipment and motor units have added to the combat power of the Cavalry and increased its versatility,

Colonel Palmer said.

"Versatility of the units using horses is the key to the whole matter. These troops can maneuver on any terrain, day or night, regardless of weather condition. Speed has been added to the troops, which now have motor units as well as horses," he added.

Colonel Palmer's explanation will be of interest to many civilians who have been unable to understand the value of horses in modern warfare. The officer's willingness to discuss military advances should be commended; too often laymen are woefully ignorant of the progress being made by our defense forces.

THE CAVALRY SCHOOL DIGEST OF INFORMATION



Employment of Cavalry Machine Guns and 37-mm Guns

THE LIGHT MACHINE GUN IN THE MOUNTED ATTACK

LIIGHT machine guns, in small units which have no fire support from heavy machine guns, may be used in the mounted attack according to the principles of the heavy machine gun, to carry out the latter's mission of supporting fire. When heavy machine guns are present, however, the light guns in pack usually follow the rifle units into the enemy position, where they prepare to pursue by fire, protect the reorganization of mounted units, and meet unexpected emergencies. Some riflemen, possibly with light guns, may be used to protect the heavy guns.

THE HEAVY MACHINE GUN IN THE MOUNTED ATTACK

The heavy machine gun is the principal supporting weapon in the mounted attack. Every available gun should be in action, none held in reserve. None should be attached to subordinate units unnecessarily, as they render better service when their fire can be centrally controlled. They do not take part in the assault. Their mission is to pin the enemy to the ground with fire, to support the mounted elements with fire, to protect their flanks, to fire on enemy supports and led horses, to cover the reorganization, to pursue by fire, to break up counter-attacks, and to cover a withdrawal. To accomplish these missions, they fire from one flank or both flanks, or use overhead fire.

A mounted attack against Infantry is usually prepared deliberately. It requires close coöordination of fire and maneuver. This may include a preparation of fire followed by a sudden launching of the attack, or a sudden

opening of fire accompanying the attack, or both. Fire should be directed first on the whole enemy line and then shifted to that part of his line to be assaulted. Terrain will usually favor the position of guns on one flank of the attack only. The fire should be as nearly as possible at right angles to the direction of attack. Guns should have local protection of rifles and light machine guns, if necessary. Overhead fire may be used, if a suitable position 800 to 1,500 yards from the enemy, and observation of strike, can be obtained. The fire may be indirect if the range is accurately known, friendly troops can be seen, and strike is visible. When the mounted attack approaches the enemy, fire must be stopped or shifted to prevent losses. Fire is shifted by traversing outward to the enemy's flank or flanks, ahead of our leading mounted elements, or lifted to rear targets. Overhead fire is stopped or lifted to rear areas. When the assault goes home a portion of the heavy guns may move forward to assist in consolidation, though this is less necessary with the light machine gun than with the machine rifle.

The mounted attack against Cavalry will usually be hastily prepared. It will generally require fire support. The fire preparation will be short or nonexistent. Fire will be opened as soon as possible and reach its maximum intensity simultaneously with the launching of the attack. It will be directed at the enemy mounted elements rather than at the machine guns he may have in action. Direct fire, not overhead, is normal. Concealment of guns is of secondary importance to rapid selection and occupation of position. Positions conform to those in the mounted attack against Infantry. Guns may be dropped

off in a selected position while the mounted elements maneuver for a flank attack.

THE CALIBER .50 MACHINE GUN IN THE MOUNTED ATTACK

Caliber .50 machine guns should be sited in the mounted attack against Infantry well out to the flanks, with local protection, to fire against an attack by armored vehicles. If no mechanization is suspected to be present, especially in a mounted attack against Cavalry, the caliber .50 machine guns may be used as anti-machine-gun weapons.

THE 37-MM GUN IN THE MOUNTED ATTACK

These guns should be used in a deliberately prepared mounted attack against Infantry to silence enemy machine guns during the preparatory and accompanying fire. In a hastily prepared mounted attack against Cavalry, there will usually be little time to locate enemy machine guns in action or to silence them, but the 37-mm guns should be used in an effort to do so.

THE LIGHT MACHINE GUN IN THE DISMOUNTED ATTACK

In support of a dismounted attack, the light-machine-gun platoon may be used in one of three ways: first, as a unit; second, by attaching one or more of its light-machine-gun squads to rifle platoons; and third, by attaching all three of its light-machine-gun squads to their corresponding rifle platoons. The first disposition is made when there is only one good position for the guns and the ground over which the rifle troops are to advance is unsuitable for the use of the guns. In this case the guns are used in a manner similar to that employed in support of a mounted attack, except that it is not so important to obtain fire at right angles to the direction of attack. The second disposition may be made when the attachment of guns to all the rifle platoons would cause the fire of some of the guns to be wasted. If exposed, the guns should have a small escort. The third disposition is made in the absence of the special conditions mentioned. In this case the leader of the light-machine-gun platoon, his messengers and platoon sergeant join the troop commander. When a light-machine-gun squad is attached to a rifle platoon, the rifle platoon commander may attach one or more of the gun crews to one or more of his rifle squads.

THE HEAVY MACHINE GUN IN THE DISMOUNTED ATTACK

Heavy machine guns may be used to support the attack of the regiment as a whole; some may be used for this purpose, while others are attached to squadrons; or all the guns may be attached to squadrons. The first use is preferable from the point of view of control and supply of the guns and should be used when the front of attack is small enough for the guns to cover from a single location all parts of the enemy position. The second method should be used when the guns necessary to cover one squadron will be so far from the guns in general support

as to preclude control by the machine gun troop commander, and the third method, which is exceptional, is used only when the ground is such that guns in general support could accomplish no good. No guns should be held in reserve. The mission of heavy machine guns in the attack is to support the assaulting echelon by fire at all suitable ranges on points where the attack is being held up; fire on areas such as woods, villages, ravines, etc., which may conceal the enemy; fire to protect flanks or gaps in the line; and fire at rapid rate during the decisive stage of the combat. The presence of the light machine gun lessens the necessity for heavy guns actually in or near the firing line. Fire may be direct or indirect, the first being preferable, and in either case may be overhead. Positions should have covered approaches, command good field of fire, good observation and good cover in the positions themselves. The advance of guns during the attack from one position to another should be by echelon (platoon or section) so that all guns are never out of action at the same time. Heavy machine guns cover the assault on the enemy position by fire on the enemy front line, if possible, or by lifting to targets in rear. They enter the position, assist in its consolidation and pursue by fire after the position is taken.

THE CALIBER .50 MACHINE GUN IN THE DISMOUNTED ATTACK

In a dismounted attack caliber .50 machine guns should be used well to the flanks and in rear of the firing line to protect the command against hostile armored vehicles which may appear from unexpected directions. In the absence of 37-mm guns, caliber .50 machine guns may be used as anti-machine-gun weapons.

THE 37-MM GUN IN THE DISMOUNTED ATTACK

These guns are a most important weapon in the dismounted attack, as their primary function is to silence enemy machine guns, which will undoubtedly be present in any enemy defense. They should be left under the control of the machine gun troop commander, who will use them under his general mission of supporting the attack. They should have positions on high ground and within effective range of the enemy positions. As soon as an enemy machine gun is located, one or more of the 37-mm guns opens fire on it until it is silenced.

MACHINE GUN AND 37-MM GUNS IN COMBINED ATTACKS

These guns are used in combined attacks, as well as in attacks in more than one direction, in conformity with the principles enumerated for the mounted attack and for the dismounted attack made in a single direction, depending upon whether they are a part of the mounted elements or of the dismounted elements. All or the bulk of the guns usually support the secondary attack, or at times are attached to it, with only a small portion or none attached to the maneuvering force. The attachment of guns to the maneuvering force is usually dependent upon whether or not it is to go beyond support of the

secondary attack. Wherever the guns are placed, they should be prepared to concentrate all their fire on the part of the enemy line where the main blow is to fall just before the assault is launched.

MACHINE GUNS AND 37-MM GUNS IN PURSUIT AND EXPLOITATION OF A BREAKTHROUGH

In both pursuit and exploitation of a breakthrough, machine guns and 37-mm guns are present with the Cavalry organizations of which they are a part. In pursuit the caliber .30 guns with the direct pressure are used as in attack, the guns with the encircling force are used as in defense, or as in attack, depending on the type of action used by the encircling force. In both cases they must be used boldly, employing direct fire. Caliber .50 machine guns and 37-mm guns are used principally in their specialties, the former to fire on armored vehicles, the latter on enemy machine guns, but as the object of the pursuit is to disorganize the enemy, the guns in this operation may be used against any remunerative target which presents itself.

In the exploitation of a breakthrough, caliber .30 machine guns march well forward in the column, help drive off small enemy delaying forces, and are employed according to the principles of their use in attack when main enemy forces are encountered. Direct fire at suitable ranges is employed. The caliber .50 machine gun and the 37-mm gun are used in their specialties, but also against other targets if needed.

THE LIGHT MACHINE GUN IN AN ADVANCE GUARD

Light machine guns, being troop weapons, are organically a part of all advance guards or elements thereof the size of a troop or larger. Whenever a rifle platoon is assigned as an advance guard, or an element thereof, a light-machine-gun squad should be assigned to it. The light machine guns in an advance guard or element thereof should be placed so that they may be brought into action early. In a rifle platoon, the light-machine-gun squad which may be attached is at the rear of the platoon. In a rifle troop, the light-machine-gun platoon should be placed behind the leading rifle platoon or ahead of the last rifle platoon. The guns are useful in driving off small bodies encountered and in holding ground already gained, in case the advance guard is halted and forced to dismount. If the advance guard attacks, or is itself attacked, the light machine guns are used according to the principles of their use in attack and defense.

THE HEAVY MACHINE GUN IN AN ADVANCE GUARD

Heavy machine guns are assigned to advance guards in number in approximately the same ratio to the total number of heavy machine guns that the strength of the advance guard bears to the strength of the whole command. A rifle troop may have a section of two heavy machine guns attached, and a squadron usually has a platoon of four heavy machine guns attached. A section

of heavy machine guns should never be divided between two elements of an advance guard. The guns should march at the tail of the rifle unit, or, in case early use of the heavy guns is contemplated, ahead of the last rifle unit. The distribution will also vary with the nature of the country, guns being well forward in rolling country but farther back in open, flat or densely wooded country. In a meeting engagement, by seizing good positions early and by firing at long and mid ranges on formed enemy bodies and on defiles, such as bridges, the guns can insure holding the ground gained until the main body can deploy. The guns occupy positions on high ground and deny important terrain features to the enemy. They should be prepared for fire at close ranges as well as at long and mid ranges. Alternate positions are reconnoitered, and used if time permits. Guns are useful in breaking off an advance guard action without bringing on a general engagement not desired by the commander of the main body. If a general attack or defense develops, the heavy machine guns are used according to the principles of their use in attack or defense.

THE CALIBER .50 MACHINE GUN IN AN ADVANCE GUARD

If enemy armored vehicles are expected to be met on the march, it is important to have caliber .50 machine guns with an advance guard the size of a troop or squadron, or even one the size of a platoon. The principle of their use is that they should be distributed in depth so that an enemy vehicle, approaching on the road on which the advance guard is moving, must run through the fire of several guns. The individual guns may be separated for this purpose. A reasonable disposition of the guns is to have one gun at the tail of the reserve and one near the head of the main body, or a gun each at the head and tail of both the support and the reserve; or, if there is no reserve, one gun at the tail of the advance party and one near the head of the support. If armored vehicles approach on the road, all elements clear the road to the same side, the caliber .50 guns go into action, covering the road with fire directed away from our own rifle units. Distribution in depth also allows rapid opening of fire by all caliber .50 guns against an armored-vehicle attack from either flank, especially if there are several advance guards or the advance guard is on a broad front.

THE 37-MM GUN IN AN ADVANCE GUARD

The 37-mm gun should be assigned to an advance guard in about the same ratio to the total number of 37-mm guns present that strength of the advance guard bears to the total strength of the command. A war-strength squadron in advance guard should, therefore, have a 37-mm gun present as a part of the heavy-machine-gun unit attached to the advance guard. Sufficient time is usually available in a meeting engagement, before the enemy machine guns can be located, to bring the 37-mm guns forward to engage them.

MACHINE GUNS AND 37-MM GUNS IN A REAR GUARD

In general, the assignment and distribution of machine guns and 37-mm guns in a rear guard are similar to those in an advance guard, except that if the flanks of the main body are secure, machine guns in a rear guard should be in even greater proportion and distributed closer to the enemy than in an advance guard. Light machine guns are normally assigned to any element of a rear guard the size of a platoon or larger. The light machine guns in any element should be placed toward the tail of the element. Heavy machine guns are normally assigned to any element of a rear guard the size of a troop or larger, in which they march farther from the tail of the element concerned than do the light guns. In case the rear guard fights a delaying action, the guns are employed according to principles which will be explained for such actions. Heavy machine guns in the World War were the principal and most effective weapon used in rear-guard actions, in which they were usually the preponderant, and sometimes the only, weapon. They were often left to hold out until the last, even if sacrificed. The number of caliber .50 guns assigned to a rear guard depends on the seriousness of the threat from mechanization. The principle of the distribution of caliber .50 machine guns in depth is adhered to, single guns frequently being assigned to different elements. The 37-mm gun is the only weapon of the four discussed which is perhaps less important in rear guards than in advance guards, for the reason that rear-guard actions are often broken off before the enemy machine guns are located.

MACHINE GUNS AND 37-MM GUNS IN A FLANK GUARD

The number of machine guns and 37-mm guns attached to a flank guard varies considerably, depending on the amount of combat to be expected of the flank guard. In general, the number of caliber .30 machine guns and 37-mm guns in a flank guard should be in about the same ratio to the number of caliber .30 machine guns and 37-mm guns in the entire command that the strength of the flank guard bears to the strength of the whole command. A troop on flank-guard duty has its organic light machine guns; it may or may not have a section of heavy machine guns. As the flank guard is more likely to receive opposition from the flank than on its head or tail, the machine guns, both light and heavy, should normally be distributed along the column, with the light guns nearer the head and tail than the heavy guns. Caliber .50 machine guns may be attached to a flank guard if danger from mechanization exists. If only one gun is present it might march in the center of the column. When the flank guard arrives at a key point, dispositions, or at least a reconnaissance, should be initiated to defend that position as long as necessary to let the main body move out of danger. Positions for the guns should be determined at once. If the flank guard has to engage in combat, either offensive or defensive, the machine guns are handled according to the principles of their use in such actions.

THE LIGHT MACHINE GUN IN AN OUTPOST

Light machine guns are always present with an outpost, or any element thereof, the size of a rifle platoon or larger. Since each support is always as large as a platoon, each will have at least two light machine guns. Since this gun has a stable mount which allows it to be sited in daylight for fire after dark and is capable of very rapid single-shot fire, and even of automatic fire in emergencies, it is a much more satisfactory weapon for outpost duty than was the machine rifle, which lacks these characteristics. The light machine gun with the supports, and detached posts if any, should be sited as indicated, covering the main avenues of approach, principally the roads leading into the position. If, in addition, they can cover defiles, such as bridges, culverts, gorges, etc., their positions will be that much stronger. Outguards must be warned to avoid these approaches when forced to withdraw. If night positions of the supports are different from day positions, both must be reconnoitered, and light machine guns must actually be in their night positions before dark.

THE HEAVY MACHINE GUN IN AN OUTPOST

While heavy machine guns are ideal weapons for an outpost, because of their stable mounts and sustained automatic fire, commanders must avoid using the same gun units more often than they use the same rifle units in this arduous duty; otherwise machine gun units will be working every night, as well as every day, and soon become exhausted. It is now entirely possible to do this and still have effective outpost duty, because of the suitability of the light machine gun for the same purpose. It is reasonable, however, if considered necessary, to have heavy-machine-gun positions and routes thereto in the outpost reconnoitered in daylight by officers and non-commissioned officers of machine gun units not attached to the outpost, for use in case of an attack in force on the outpost line. The outpost may have attached its proportional number of heavy machine guns, but should have no more. This means a section of guns to a rifle troop and a platoon of guns to a squadron. These guns may be attached to a particular support, or supports, if to do so will insure covering all the avenues of approach which it is considered will require heavy-machine-gun defense. If there are more such avenues of approach than there are pairs of guns (or single guns, if it is decided to post them singly), then some or all of the guns attached to the outpost should be kept in the outpost reserve, positions with routes thereto reconnoitered, and the positions actually occupied only in case of an attack on the outpost. The best positions for the guns are covering the most important of the avenues of approach, such as the main roads. In addition, positions should permit of fire on ground from which the enemy might harass the main body, fire between the outguards, flanking fire in front of neighboring supports and fire to the flanks of the outpost line of resistance. Provision should be made in day-

light for fire at night, for change from day to night, and from night to day, positions, and for alternate positions.

THE CALIBER .50 MACHINE GUN IN AN OUTPOST

Caliber .50 guns may be attached to the outpost if danger from mechanization exists, but again care should be taken to avoid working the crews of these guns both night and day. If attached, the guns in the outpost should be sited, if practicable, in depth, on the main road or roads leading into the position.

THE 37-MM GUN IN AN OUTPOST

The 37-mm gun is not useful in the early part of an outpost action, since enemy machine guns will rarely be located until the action is well advanced. It is usually better to keep most of them with the regiment, with positions centrally located on high ground and routes thereto reconnoitered until actual need for their use arises.

MACHINE GUNS AND 37-MM GUNS IN COMBAT PATROLS AND CONNECTING GROUPS

Caliber .30 machine guns are useful in combat patrols and connecting groups, and should be assigned to them in the same proportion as the size of the detachment bears to that of the whole command. The light machine gun permits a small combat patrol to go farther to a flank and a small connecting group to maintain contact with a unit farther to the flank, than was the case with the machine rifle. It is also helpful in driving off small enemy bodies. Heavy machine guns may augment the fire of light machine guns in large or very important combat and connecting groups. They are useful in holding off large enemy forces until the arrival of reinforcements. Both light and heavy guns are used according to the principles of defense to be explained later. Caliber .50 machine guns and 37-mm guns are used, for obvious reasons, only when the detachment is large enough to include these guns in the same proportion as they exist in the whole command.

MACHINE GUNS AND 37-MM GUNS AS SPECIAL SECURITY WEAPONS AGAINST ATTACK AVIATION

The chief reliance of Cavalry against attack aviation is effective fire power. The best Cavalry weapon to furnish this fire power is the heavy machine gun, because of the cone of fire which it produces when used with full automatic fire, and its all-purpose tripod. In emergencies, such as an air attack may be assumed always to constitute, the light machine gun and the caliber .50 machine gun on its vehicular mount may also be used. Caliber .30 and caliber .50 machine guns on trucks and scout cars are the only protection of these vehicles against air attacks. All caliber .30 guns in a command on the march should get into action against any air attack. In camp heavy machine guns should be sited for antiaircraft protection, but full crews should not be kept permanently at the guns. The 37-mm gun is not used for this purpose.

THE HEAVY MACHINE GUN IN DEFENSE

Heavy machine guns are the most effective defensive weapons known. They form the framework of the defense, both active and passive. Some guns may be assigned in small numbers to the outpost forces. These should not be in greater proportion to the number of 37-mm guns present than the strength of the outpost bears to the total strength of the command. Because of their mobility the guns may be used later in the main position, usually as rear guns, when the outpost is driven in. Guns with the outpost may sometimes be sacrificed; they remain in position when the outpost is driven in, and break up enemy formations before they reach the main position. All or most of the heavy machine guns are used by the holding forces. None are necessary with local outposts. The bulk of the guns in the main position are placed so as to fire on likely avenues of enemy approach (sector fire), and to place final protective lines (bands of fire) in front of the main line of resistance. These are called forward guns. Other guns may be placed primarily to prevent complete penetration of the position and to support counterattacks. These are called rear guns. In an active or a deployed defense, especially of small units, rear guns are usually omitted.

In an active or a deployed defense, forward guns may be placed primarily for sector fire, whereas in a passive or a position defense they may be placed primarily for bands of fire. Both missions should be provided in any case. Forward guns are sited for direct fire and, if in sufficient numbers, are placed in pairs. The final protective line of a gun or a pair of guns may be coincident with one of the limiting lines of its sector. Range cards are prepared. Guns should be laid in daylight so that they can carry out their missions in darkness, fog, or smoke.

Rear guns are placed in or near the squadron or regimental reserve line, and not farther in rear of the main line of resistance than their effective range, less 500 yards. They use overhead fire to cover the front of the position. Primarily, they limit enemy penetrations, by covering the flanks and rear of forward rifle groups, and support counterattacks. No guns are held in reserve. All are placed in firing positions, even if organically a part of a reserve rifle unit.

The heavy machine guns of a regiment are placed by the machine gun troop commander, in accordance with the orders of the regimental commander. While they may be sited in squadron areas, they are not usually attached to squadrons. Although not attached to smaller rifle units, adjustment between the positions of rifles, light machine guns and heavy machine guns will be necessary. This will frequently and properly prevent the occupation of the most ideal positions for the heavy machine guns, although the latter should be given preference.

A hill is defended by placing heavy machine guns on its shoulders or flanks rather than on its summit; a ravine, by placing guns at its head and on one or both sides so as

to sweep its sides with fire; a ridge, by diagonal fire across its face or along its crest. In defending ground forms, fire should be parallel to contours, not perpendicular to them. A wood or village is defended by flanking fire across its front, sides and rear, from guns placed inside and on the flanks and rear of the wood or village; and a stream, by fire on likely crossing places and on likely approaches to the farther bank.

When an attack develops, forward guns open fire first on remunerative targets in their sectors and close with the attack until their fire is laid on their final protective lines, where it remains. Rear guns fire in front of the position and on units penetrating or outflanking the position. If the attack breaks down, guns pursue by fire. If it succeeds, guns either hold out until captured or cover the withdrawal of our own troops.

THE LIGHT MACHINE GUN IN DEFENSE

In defense, light machine guns may be used in outposts, combat patrols and other small units which have no heavy machine guns, to take over some of the missions usually assigned to heavy machine guns. The light guns have a shorter maximum effective range for sector fire and less power of continuous automatic fire for bands of fire.

In the main position when heavy machine guns are present, all or part of the light guns may be used to complete the sector fire and final protective lines of the position, if it is too wide to be covered by the number of heavy guns available. If there are a sufficient number of heavy guns available to cover the front with sector fire and bands of fire, light guns may be used to cover the inevitable gaps and dead spaces in the sectors and bands of fire of the heavy machine guns and to supplement the latter by sector and flanking fire of their own. For these purposes, the light machine gun, because of its stable mount, is a greatly superior weapon to the machine rifle. For whatever purpose or purposes the light guns may be used, they should not be detached from the troops to which they organically belong.

Coördination of their fire with that of the heavy machine gun is obtained by consultation and agreement between the machine gun troop commander and the commanders of the rifle units concerned, supervised by the regimental commander or his representative. The light guns may be retained under the direct control of the rifle troop commander and placed at his direction, or he may attach all or part of them to his rifle platoons. The rifle platoon commander will usually place the light guns to the best advantage in his combat group and may attach one or both of them to his rifle squads. A possible and correct disposition of his light guns by a troop commander in his area might be to place two of them to put down a band of fire across his front where the heavy guns have been unable to place one; to attach a second pair to one of his platoons to fire to the front down a draw not covered by the flanking fire of the first pair; and to place the third pair in, but not attached to, his support platoon

to cover the flanks and intervals between his two front-line platoons.

Front-line guns should have sector missions, in which they fire on targets of opportunity within their sectors, as well as any final protective line missions assigned. Light guns are sited for direct fire. They may be sited singly or in pairs. Because of the danger of their overheating in the final stages of a defense, the latter is more important in a final protective line mission. Light guns are useful for night firing and should be so used. They should have alternate positions. All guns are given fire missions, even those with support and reserve units, though the latter do not usually fire in front of the main line of resistance, except in particularly favorable conditions of terrain.

THE CALIBER .50 MACHINE GUN IN DEFENSE

The caliber .50 machine gun is sited in defense for its principal mission of anti-mechanization. If there is a particularly favorable avenue of approach for mechanization from the front, guns may be placed in or near the front line to cover it. If not, they should be placed well out toward either flank and in rear of the firing line, with local protection provided. If no enemy mechanization exists or is present, they may be used as anti-machine-gun weapons, but always with the understanding that, if so used, the risk is run of being short of ammunition for their principal target, mechanization, should it appear. The guns should be sited for direct fire.

THE 37-MM GUNS IN DEFENSE

The 37-mm guns are placed in defense on high ground in rear of the front line for fire on enemy machine guns. Their usual location is somewhere in the area in rear of the support line and in front of the regimental reserve, which will allow them to fire in front of the front line. They may use indirect fire, usually overhead, although direct fire is preferable if concealment can be obtained. They are employed under the supervision of the machine gun troop commander, and are often separated as individual guns. They should have alternate positions selected to which they may move if located or if they are drawing fire on adjacent rifle units. They may be used as antitank weapons, with the same reservation as that mentioned for the use of caliber .50 guns as anti-machine-gun weapons.

THE LIGHT MACHINE GUN IN SUCCESSIVE DELAYING POSITIONS

The light machine gun, being a troop weapon, with a maximum effective range of about 1200 yards, which corresponds to the maximum limit of mid range (700-1200 yards), is of great value in causing the enemy to deploy beyond the range of effective rifle fire. As the delaying force may, and usually does, withdraw before the enemy gets within close range, the light machine gun in small commands (without artillery or heavy machine guns) may be the only weapon to fire in any po-

sition. It should, therefore, be given the choice of position by the rifle unit under the control of which it may be operating. The rifle units then become in effect the escorts of the light machine guns. The rifle troop commander may keep the light-machine-gun platoon under his control and use its fire as a unit, which may result in the most efficient fire effect at mid range. This is a particularly suitable use of the guns, if there is one good machine-gun position, and only one, in the sector of the rifle troop. He may attach some or all of the light machine guns to the rifle platoons, which is a good disposition to make, if there is no one particularly good position, but a number of good or passable ones, for the machine guns in the sector of the rifle troop. He may attach a squad of light machine guns to that rifle platoon which he contemplates using to cover the withdrawal of the other rifle platoons. The rifle platoon commander may, or may not, attach the two light machine guns which may be attached to him to one or two of his rifle squads. No matter what the disposition, all guns should be in position at the beginning of the action. None should ever be kept in reserve. They should fire at the most remunerative targets, leaving fire on enemy individuals who may infiltrate forward to the riflemen. The guns should endeavor to stop the enemy advance in large numbers or cause the enemy to deploy at natural obstacles, such as defiles. In withdrawing from one position to another, the light machine guns should remain in the forward position long enough to derive the greatest value from their fire, but not so long as to be captured. Unless it is intended to sacrifice the guns, there should always be at least a few riflemen to cover their withdrawal. The guns withdraw on order of the troop commander if they are kept together as a platoon, or on order of the commander of any smaller unit to which they are attached.

THE HEAVY MACHINE GUN IN SUCCESSIVE DELAYING POSITIONS

The heavy machine gun, having considerable accuracy of fire up to and even beyond the maximum limit of long range (1200-2000 yards), as well as the power of sustained automatic fire, is the weapon par excellence for delay. Lacking artillery, a command in a delaying position opens fire first with its machine guns. These heavy guns may be kept together by the regimental commander, but, since each delaying position is usually thinly held and therefore wide, it is more normal for the regimental commander to attach a platoon of machine guns to each rifle squadron, especially when, as they usually do, the squadrons occupy the position abreast. The squadron commanders should, however, keep the heavy-machine-gun platoons assigned to them together, rather than attach the machine-gun sections to rifle troops, unless the squadron is to occupy two positions simultaneously. The guns should be posted on commanding ground with good observation and good fields of fire to the front up to the limit of their effective fire; that is, 4,000 yards for groups of guns with M1 ammunition. Fields of fire at close

range are not so important. All guns should be placed in action. Flanking positions are not in this case necessarily the best, since most of the fire will be on the heads of columns before they deploy, with an effort made to catch them in defiles, such as bridges, saddles in the ground, draws, etc. Positions permitting overhead and indirect fire are desirable if there is time to prepare firing data. Sections or even squads may be separated by considerable intervals in order to cover a wider front and to deceive the enemy as to the strength of the position. Machine guns withdraw by echelon. They assist in covering the withdrawal of rifle units. The light machine gun, with fire power greater than that of the machine rifle, permits the heavy machine guns to withdraw earlier than formerly. A reasonable order of withdrawal of the units of a squadron in a regiment, with a platoon of heavy machine guns attached to each squadron, would be as follows:

First, the rifle troop less heavily engaged.

Second, the heavy-machine-gun platoon.

Third, the other rifle troop (less the light-machine-gun platoon, if not attached to smaller rifle units, and one rifle platoon).

Fourth, the light-machine-gun platoon.

Fifth, the remaining rifle platoon (which becomes the rear guard, if the march is to be resumed).

Gun positions for both light and heavy machine guns in the second position should be reconnoitered before its occupation. This is usually done by the second in command of the gun unit concerned. Routes of withdrawal are usually reconnoitered by the rifle units and the same routes followed by the guns. In large commands heavy machine guns may sometimes be ordered to occupy temporarily intermediate delaying positions between the main delaying positions. Guns in the second position should be ready to fire before those in the first position withdraw.

THE CALIBER .50 MACHINE GUN IN SUCCESSIVE DELAYING POSITIONS

The caliber .50 machine gun, being designed primarily for use against armored vehicles, is used in delaying actions according to whether or not enemy mechanization is expected. If the immediate enemy is known not to be mechanized, it may nevertheless be well to use one or two caliber .50 machine guns, each with a suitable escort, well out to the flanks and to the rear of the firing line to protect the command against possible mechanized threats from unexpected sources. The caliber .50 machine guns in use should withdraw by echelon, the first about the same time as the first rifle units. If the enemy is known or suspected to be wholly or partly mechanized, as many caliber .50 machine guns as are available should be used in delaying the advance of the mechanized force. They should be placed well out toward the probable avenues of approach of armored vehicles and should fire on enemy vehicles at the earliest possible moment which promises hits. Vehicles on roads or in defiles pre-

sent the best targets. In emergencies the guns may also be used to fire on massed targets and machine guns. They may be held under regimental control, or assigned proportionately to each squadron, and should have a suitable escort of riflemen and possibly of caliber .30 machine guns. They withdraw by echelon, or with the squadron to which attached.

THE 37-MM GUN IN SUCCESSIVE DELAYING POSITIONS

These guns should be used under regimental control to silence enemy machine guns. In emergencies they may be used against massed targets and led horses. They should be placed on high ground. If successful in their mission, they will materially slow down the enemy advance. They should withdraw by echelon about the same time as the rifle troops.

MACHINE GUNS AND 37-MM GUNS ON RECONNAISSANCE AND COUNTERRECONNAISSANCE

Heavy machine guns, caliber .50 machine guns and 37-mm guns may be attached to reconnaissance detachments, in the proportion normal to the size of the detachment. Thus, a troop may have a section of heavy machine guns and a section of caliber .50 machine guns attached and a squadron may have a platoon of heavy machine guns, a platoon of caliber .50 machine guns, and a 37-mm gun attached. Variations from normal assign-

ments should be made only for specific reasons. These weapons normally march with the main body of the detachment, the heavy machine guns and the 37-mm guns together. The former are used in accordance with the principles of their use in offensive action, the latter against enemy machine guns which disclose themselves. The caliber .50 machine guns march so disposed as to protect the front, rear and flanks of the detachment against hostile mechanization. The caliber .50 machine gun may have a secondary mission of anti-machine-gun fire, and the 37-mm gun a secondary mission of anti-mechanization fire.

Heavy machine guns, caliber .50 machine guns, and 37-mm guns may be attached to counterreconnaissance detachments, usually in the same proportion to the number of these weapons in the regiment that the size of the detachment bears to the size of the regiment. Thus, a troop may have a section of heavy machine guns and a section of caliber .50 machine guns attached and a squadron may have a platoon of heavy machine guns, a platoon of caliber .50 machine guns, and a 37-mm gun attached. Variations from normal assignments should be made only for specific reasons. These weapons normally march with the main body of the detachment, the heavy machine guns and the 37-mm guns together, the caliber .50 machine guns distributed in depth.

A Form for An Estimate of the Situation

FOR purposes of instruction in the Academic Division, The Cavalry School, the following form is considered proper for an estimate of the situation:

1. MISSION.—State the mission assigned by higher authority or deduced from the instructions from that source.

2. OPPOSING FORCES.—In the subparagraphs under this heading should appear a consideration of the factors affecting the combat strength of the opposing forces and a comparison from which is deduced the relative combat strength.

a. *Enemy Forces*.—Consider the disposition, the numerical strength, combat efficiency (physical condition, morale, training), and composition of the forces of the enemy; the material means, including supply and equipment, at his disposal; and the assistance to be expected from neighboring troops.

b. *Own Forces*.—Consider with respect to your forces the factors corresponding to those considered under a.

c. *Relative Combat Strength*.—Compare the considerations in a and b and deduce the relative combat strength of the forces that are likely to be in opposition to your attempt to execute the mission stated in paragraph 1.

3. TERRAIN.—Consider the general aspect of the terrain—hilly, open, wooded, etc.; stream lines and their importance as obstacles; general direction of ridges; ade-

quacy of maneuver space; concealment; road net—ample or restricted; observation. Does the terrain favor or eliminate certain types of action? Does the terrain favor or hinder us in the accomplishment of our mission?

4. POSSIBLE LINES OF ACTION.—a. *Own Forces*.—State, in general terms only, all lines of action open to you which, if successful, will accomplish your mission or facilitate its accomplishment.

b. *Enemy Forces*.—State, in general terms only, all possible lines of action, within the physical capabilities of the enemy, which can affect adversely or favorably the accomplishment of your own mission.

5. ANALYSIS AND COMPARISON OF OPPOSING LINES OF ACTION.—a. *Enemy Lines of Action*.—Determine the probable effect of the execution of each of the lines of action open to the enemy on the execution of each of the lines of action open to you. This will generally require, with respect to each of the possible lines of enemy action, an analysis of the principal factors involved in the execution of this line of action, such as: necessary changes in troop dispositions; the time required for such changes; influence of the terrain; influence of the weather; influence of routes of communication on troop movements, evacuation and supply; influence of all factors pertaining to relative combat strength.

b. *Own Lines of Action*.—With respect to each of the lines of action open to you, determine its practicability and weigh its advantages and disadvantages. This will

require full consideration of your mission, the existing strategical or tactical situation, the probable effect of the execution of each line of action open to the enemy (as previously determined), and factors of the nature stated in paragraph 4 a. As a result, determine which line of action is most advantageous for carrying out your mission regardless of *any* action that may be taken by the enemy.

6. DECISION.—State the commander's *basic decision* which is reached as a result of the analysis and comparisons of all the elements of the estimate made above. This statement is brief and covers, in concise and definite terms, what the command as a whole is to do to meet the immediate situation and, in general terms, where the operation is to be carried out.

Departmental Texts

DURING the past year as a special project the Departments of the Academic Division have each prepared texts for their respective departments, with a view to combining under one cover practically all data and information required by that department in the conduct of its courses.

The texts are a compilation of matter contained in basic field manuals, training regulations, manuals, school texts, etc., and a considerable amount of new material not heretofore published. They are divided respectively into volumes, parts, chapters and sections, stapled by chapter and prepared for arrangement in loose leaf, stiff backed binders.

The Department of Weapons and Matériel text will consist of three volumes divided into seven parts, generally subdivided as follows: General Subjects (including the technique of the regimental headquarters and machine-gun troop), Light Machine Guns, Musketry and Combat, Packs and Harness, Heavy Machine Guns, Special Purpose Weapons (including the caliber .50 machine gun, the submachine gun, and the 37-mm gun), Firing at Moving Targets, both Ground and Aerial, Demolitions, Radio Sets, and Motor Vehicles. Text is profusely illustrated and contains a considerable quantity of new material for which there has been much demand.

The Department of Tactics text will consist of one volume, in three parts: Tactical Principles (Horse Elements), Tactical Principles (Mechanized Elements), and Logistics. It replaces the former school publication, Tactical Principles and Logistics. It contains the latest ideas and developments and much new material, especially in connection with mechanization, as far as established facts will permit, and motorization as utilized by the Cavalry Arm.

The Department of Horsemanship text consists of one volume divided into four parts as follows: Education of the Rider, Education of the Horse, Animal Management, and Horseshoeing. The text contains many very excellent illustrations and the material is presented in a simple and logical manner.

These texts fill a long-felt need by the Cavalry service in general, and it is believed form the basis for a Cavalry manual eventually. Annual revision is contemplated to include the latest and most recent changes and developments.

The texts are for sale at a minimum cost and can be obtained through the CAVALRY JOURNAL or direct from the Book Department, The Cavalry School. It is believed every Cavalry officer, Regular, National Guard, or Reserve, should have these books in his personal library.

A Map Problem

EMPLOYMENT OF MACHINE GUNS AND 37-MM GUNS (War-strength organization)

SITUATION

GENERAL SITUATION.—*Maps*.—Road Map of Fort Riley, Kansas, and vicinity, 1/125,000, 1931; Special Military Map, Fort Riley, Kansas, 1/20,000, 1934.

The Kansas and Republican rivers form part of the boundary between two states at war, Red (north) and Blue (south).

The Republican and Kansas rivers are unfordable. The Smoky Hill River is fordable. The Washington Street Bridge and the Engineer Bridge are open to traffic.

All units of Red and Blue are at war strength, with similar organizations.

Fort Riley is not garrisoned.

SPECIAL SITUATION (BLUE).—The I Cavalry Corps, consisting of the 1st, 2d and 3d Cavalry Divisions and

corps troops, mobilized south of the international boundary. Red forces of all arms, which include armored cars, mobilized north of the line: Garrison-Clay Center.

The Blue Corps was ordered to advance into Red territory on 28 October, 1935, covering the advance of other Blue forces, between the Blue and the Republican rivers. The 2d Cavalry Division was ordered to march east of Highway 77 (exclusive). The 3d Cavalry Brigade, consisting of the 2d and 13th Cavalry Regiments, was ordered to operate in the zone: East boundary: Engineer Bridge—section road three miles east of Highway 77 (both inclusive); west boundary: Highway 77 (exclusive), with the 4th Cavalry Brigade on its right (east) and units of the 1st Cavalry Division on its left (west). Army, corps, and division reconnaissance agencies were ordered to operate in advance of the marching columns.

The 3d Cavalry Brigade was ordered to drive back all enemy forces encountered.

Pursuant to orders from higher authority, Brigadier

1936

THE CAVALRY SCHOOL DIGEST OF INFORMATION

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General 3d Cavalry Brigade's plan for the march was in part as follows:

To march via the concrete bridge one mile west of Fort Riley—North Gate—section road two miles east of Highway 77.

To have the 1st Squadron, 2d Cavalry, with the 2d Cavalry Scout Car Platoon (less command section) attached, as it may be further reinforced, precede the main body by one mile as advance guard.

To have the main body march in the order: 2d Cavalry (less advance guard), 13th Cavalry.

To have the grouped combat trains (horsed) follow the main body without distance and the grouped field trains follow the main body without delay.

FIRST REQUIREMENT.—Attachment of guns, if any, to the advance guard.

SECOND SPECIAL SITUATION

A SOLUTION OF FIRST REQUIREMENT.—Attachment of guns to the advance guard. One platoon of heavy machine guns, one 37-mm gun squad and one platoon of caliber .50 machine guns attached to the advance guard.

SECOND SPECIAL SITUATION (BLUE).—Major 1st Squadron disposed his advance guard with one-half of Troop A, with two light-machine-gun squads attached, as advance party, with three points of one squad each, one on each of the three section line roads, respectively one, two and three miles east of Highway 77. Troop A (less the advance party) as support, and Troop B as reserve.

SECOND REQUIREMENT.—Disposition of the units of the Machine Gun Troops of the 2d Cavalry attached to the advance guard.

Disposition of the units of the Machine Gun Troops of the 2d Cavalry in the main body.

Disposition of the light machine gun platoons in the rifle troops of the 2d Cavalry.

THIRD SPECIAL SITUATION

A SOLUTION OF SECOND REQUIREMENT.—Disposition of the units of the Machine Gun Troops of the 2d Cavalry attached to the advance guard:

One section of heavy machine guns at the tail of the support, the other at the tail of the reserve.

The 37-mm gun at the tail of the reserve in rear of the heavy machine guns.

Caliber .50 machine guns one each at the head and the tail of both the support and the reserve.

Disposition of the units of the Machine Gun Troops of the 2d Cavalry in the main body:

One car of the antiaircraft section just in rear of the advance guard, one just ahead of the main body, one between the 2d and 3d Squadrons, and one just in rear of the main body.

The Machine Gun Troop (less detachments) between the two squadrons.

Two caliber .50 machine guns at the head and two at the tail of the main body, one at the tail of the 2d

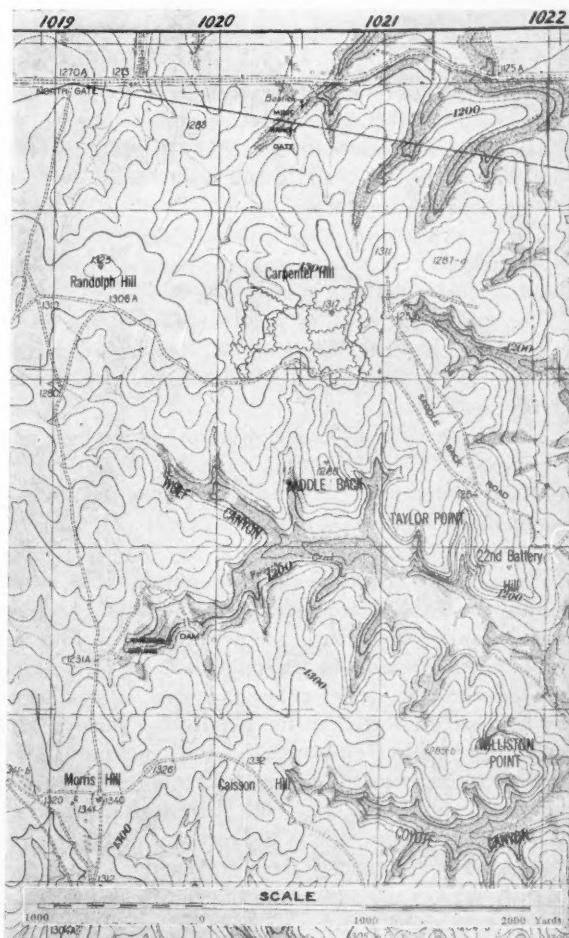
Squadron, one at the head of the 3d Squadron and two at the tail of the combat train.

Disposition of the light-machine-gun platoons in the rifle troops of the 2d Cavalry:

The light machine guns of the advance party attached, one to each point, and one at the tail of the advance party; the light-machine-gun platoon (less two squads) of the support between the two rifle platoons of the support; and the light-machine-gun platoon of the reserve between the second and third rifle platoons in column.

The light-machine-gun platoons of the 2d Cavalry, less the advance guard, at the tails of their respective troops.

SPECIAL SITUATION (BLUE), continued.—The Blue advance guard received information from reconnaissance agencies and from its own scout cars, that about an enemy cavalry regiment, with a section of armored cars attached, preceded by about a troop in advance guard, was moving south toward North Gate. The Blue center point met and drove back a Red point at Morris Hill. It reported an advance party of about a platoon on the road near Cameron Spring and a support of about a troop, less



Section of Fort Riley map to be used with overlays.

(To obtain the greatest benefit from the problem, complete your own solution of each requirement before reading the School solution or referring to overlays.)

a platoon, on the road in the vicinity of the high ground near the head of Wolf Canyon. These units were taking up the trot with the evident intention of seizing Morris Hill.

The advance party of the Blue advance guard was about 300 yards south of the crest of Morris Hill, the support was about 200 yards south of RJ 1304-A, and the reserve was about at Machine Gun Ridge.

Major Advance Guard decided to attack the Red advance guard at once, in order to allow the main body to debouch onto the high ground north of Machine Gun Ridge. His plan included the following:

To have the support of the advance guard seize Morris Hill and attack dismounted.

To have the reserve of the advance guard attack the Red support in its right (west) flank and rout it.

THIRD REQUIREMENT.—Employment (positions and missions) of all elements of the Machine Gun Troops attached to the advance guard.

Employment of the light machine guns with the support of the advance guard.

FOURTH SPECIAL SITUATION

A SOLUTION OF THIRD REQUIREMENT.—Employment (positions and missions) of all elements of the Machine Gun Troops attached to the advance guard:

The platoon of heavy machine guns to gallop at once into position on Morris Hill and open fire at once on formed bodies of the enemy.

The 37-mm gun to move forward at once, at the gallop, to Morris Hill, take position thereon and fire on any located enemy machine guns.

The caliber .50 machine guns to go into position at once near their present locations and drive off any enemy armored cars attempting to advance south toward Machine Gun Ridge.

Employment (positions and missions) of the light machine guns with the support of the advance guard:

The light machine guns of the support of the advance guard to be attached, one light machine gun squad to each platoon of the support.

SPECIAL SITUATION (BLUE), continued.—The attack against the Red advance guard was successful. The latter was defeated and driven to the northeast. The Blue advance guard advanced to the southern slopes of the high ground north of Cameron Spring, where it was halted by machine gun fire from the vicinity of Randolph Hill and Custer Hill. Development of this position disclosed the enemy regiment in deployed defense on the general line: Randolph Hill-Custer Hill, with combat patrols on Carpenter Hill and Four Way Divide. The head of the Blue main body was now about at Machine Gun Ridge.

Brigadier General 3d Cavalry Brigade decided to attack the Red regiment, enveloping its right (west) flank and rear. His plan in part was as follows:

To have the 2d Cavalry (less the 3d Squadron) attack the enemy position dismounted from the present location of the advance guard.

To have the 3d Squadron, 2d Cavalry, constitute the brigade reserve in the vicinity of Long Draw.

To have the 13th Cavalry, proceeding via the heads of Rock Spring Canyon and Pump House Canyon, Lone Tree, and the draws south, west and north of Arnold Divide, to the vicinity of ridge 1345, attack the enemy's right flank and rear and drive him to the northeast.

Colonel 2d Cavalry decides to attack with squadrons abreast, 1st Squadron on the right, boundary between squadrons, RJ 1231-A—RJ 1346, both to the 2d Squadron.

FOURTH REQUIREMENT.—Employment (positions and missions) of all elements of the Machine Gun Troops, 2d Cavalry.

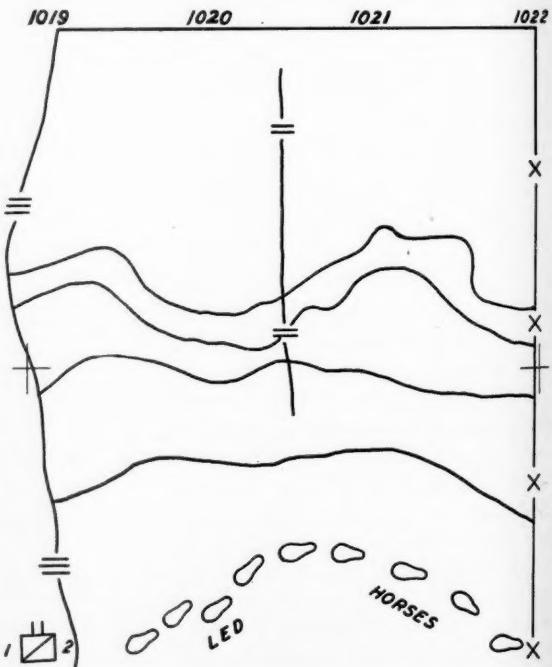
FIFTH SPECIAL SITUATION

A SOLUTION OF FOURTH REQUIREMENT.—Employment (positions and missions) of all elements of the Machine Gun Troop, 2d Cavalry:

The heavy machine guns to cover the attack initially from Morris Hill and Redoubts No. 1 and No. 2 and to move by echelon to Four Way Divide as the attack progresses.

The three 37-mm guns to move by echelon to Redoubt No. 2 to Four Way Divide and fire on located enemy machine guns.

One antiaircraft car to be with the 3d Squadron, one



Overlay No. 1.

with the led horses of each of the other two squadrons and one with the regimental command post to furnish antiaircraft protection.

Caliber .50 machine guns to be placed two each on

Caisson Hill, Morris Hill, Redoubt No. 1, Redoubt No. 2, ridge south of Redoubt No. 1 and ridge south of Redoubt No. 2, to fire on enemy armored cars.

SPECIAL SITUATION (BLUE), continued.—The attack of the 3d Cavalry Brigade was one of a series of actions by elements of the Cavalry Corps which met with varying success. The situation stabilized. The 3d Cavalry Division was withdrawn for service elsewhere. Lieutenant General I Cavalry Corps, pursuant to orders from higher authority, decided to establish a bridgehead on the general line now held by his troops.

His plan of defense is in part as follows:

Main line of resistance: Eastern edge of Camp Funs-ton-Campbell Hill-Carpenter Hill-Randolph Hill-Custer Hill-Four Way Divide-Arnold Divide-high ground north and west of Breakneck Canyon.

Formation: Divisions abreast, 2d Division on the right.

Boundary between divisions: Highway 77 (to 1st Division).

Reserve: One brigade of 1st Division at Fort Riley.

The plan of Major General 2d Cavalry Division is in part as follows:

Formation: Brigades abreast, 4th Brigade on the right.

Boundary between brigades: Engineer Bridge-grid line 1022 (to 3d Brigade).

Reserve: One regiment of the 4th Brigade at Camp Whitside.

The plan of Brigadier General 3d Cavalry Brigade is in part as follows:

Formation: Regiments abreast, 13th Cavalry on the right.

Boundary between regiments: Morris Hill-North Gate Road (to 13th Cavalry).

Reserve: One squadron, 2d Cavalry, just south of Morris Hill.

The plan of Colonel 13th Cavalry is in part as follows:

Formation: Squadrons abreast, 1st Squadron on the right.

Boundary between squadrons: Center of trench system on Carpenter Hill-Milk Ranch Gate (to 2d Squadron).

Reserve: 3d Squadron, on regimental reserve line.

Main line of resistance, support line, squadron reserve line and regimental reserve line in detail as shown on overlay.

To release combat trains.

To have the led horses immobile under cover by platoon in Forsyth Canyon.

FIFTH REQUIREMENT.—Show on overlay No. 1:

The ground, if any, in the 13th Cavalry sector which cannot be covered with fire by any of the weapons of the regiment.

The main avenues of enemy approach in the regimental sector.

SIXTH SPECIAL SITUATION

A SOLUTION OF FIFTH REQUIREMENT.—See overlay No. 2.

SIXTH REQUIREMENT.—Show on overlay No. 2 the lo-

cations of all heavy machine guns with their sectors of fire and, for forward guns only, their final protective lines, including coördination, if any, of heavy-machine-gun fire with adjacent units.

SEVENTH SPECIAL SITUATION

A SOLUTION OF SIXTH REQUIREMENT.—See overlay No. 3.

SEVENTH REQUIREMENT.—Give assignment of heavy machine guns as forward guns and as rear guns. Which of these, if any, will be attached to rifle units?

Give the plan of ammunition supply for the heavy machine guns.

EIGHTH SPECIAL SITUATION

A SOLUTION OF SEVENTH REQUIREMENT.—Two platoons of heavy machine guns to be forward guns and one platoon to be rear guns. None to be attached to rifle units.

Plan of ammunition supply for the heavy machine guns:

To have all ammunition in the gun squads dumped at gun positions and squad pack horses to refill at light wagons.

To have ammunition section deliver five boxes of ammunition to the vicinity of each gun position, to refill at ammunition distributing point and then move to cover in draw just west of Saddle Back.

Light wagons to refill at ammunition distributing point and then move to cover in same location as ammunition section.

To establish an ammunition dump or dumps if found necessary later.

EIGHTH REQUIREMENT.—Show on overlay No. 3 the locations and principal fire missions of each pair of light machine guns.

NINTH SPECIAL SITUATION

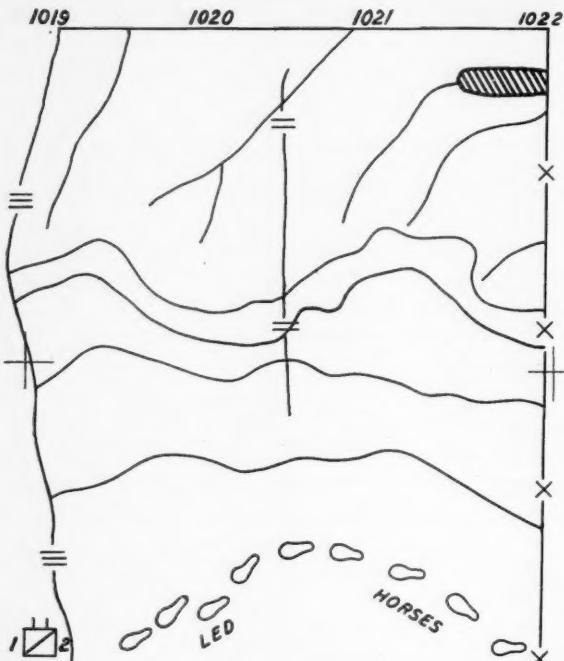
A SOLUTION OF EIGHTH REQUIREMENT.—See overlay No. 4.

NINTH REQUIREMENT.—Show on overlay No. 4 the location of 37-mm guns, the antiaircraft cars and the caliber .50 machine guns of the 13th Cavalry.

TENTH SPECIAL SITUATION

A SOLUTION OF NINTH REQUIREMENT.—See overlay No. 5.

SPECIAL SITUATION (BLUE), continued.—Red forces attacked the Blue position, making the main effort against the front of the 1st Cavalry Division. The Blue position held until a Red infantry brigade was brought up and thrown against the front of the 1st Cavalry Division. This division and elements of the 2d Cavalry, including the original corps, division and brigade reserves, which were thrown into the line without success, were driven from their trenches and were withdrawing stubbornly to the south and east. The Corps Command-



Overlay No. 2.

er ordered a general retirement to the south of the international boundary. The 1st Division was to use the Washington Street Bridge at Junction City, the 2d Division was to use the bridge at Ogden, the Engineer Bridge, and the bridges one mile west of Fort Riley.

The Reds having moved all of their available reserves to the west flank to exploit their success in that sector, the pressure against the 4th Brigade and the 13th Cavalry had materially lessened. The Division Commander ordered the 4th Brigade to withdraw at once across the bridge at Ogden.

Colonel 13th Cavalry received word that the 1st Cavalry Division and the 2d Cavalry would cover their own crossing of the river, from positions along the high ground just north of Backstop Ridge and Sherman Heights, and that he would be responsible for his own withdrawal. As the 2d Cavalry was then rapidly giving way on his left, he ordered his combat train to withdraw and cross the river, and his 3d Squadron, which has been on his regimental reserve line, as it might be reinforced, to withdraw at once to a position in the vicinity of Morris Hill and cover the withdrawal of the remainder of the regiment.

This was done and the squadron took up a delaying position with Troop I on Hill 1326 and Troop K on Morris Hill.

TENTH REQUIREMENT.—Elements, if any, of the Machine Gun Troop attached to the 3d Squadron.

Employment (positions and fire missions) of the attached units in the delaying position at Morris Hill.

ELEVENTH SPECIAL SITUATION

A SOLUTION OF TENTH REQUIREMENT.—The platoon of heavy machine guns which was on the regimental reserve line, one liaison corporal, one messenger, one 37-mm gun, one antiaircraft car, four ammunition pack animals and the rear platoon of caliber .50 machine guns were attached to the 3d Squadron.

Employment (positions and fire missions) of the attached units in the delaying position at Morris Hill:

The platoon of heavy machine guns was placed on Morris Hill to fire on any remunerative targets which presented themselves within maximum usable range on any part of the front.

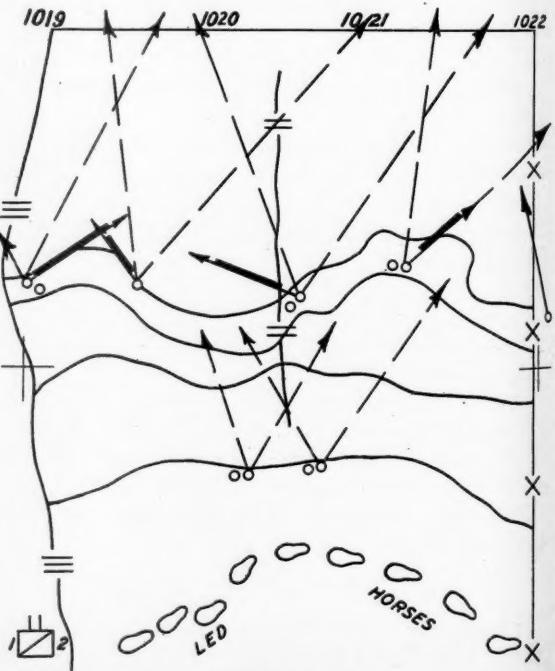
The 37-mm gun was placed on Morris Hill to fire on any located enemy machine guns.

The antiaircraft car was placed on Caisson Hill to furnish antiaircraft protection.

The ammunition pack horses were placed with the led horses of the squadron to furnish extra ammunition if needed.

The caliber .50 machine gun on Williston Point was moved to Hill 1326; the three others were not moved. All were to fire on enemy armored vehicles.

SPECIAL SITUATION (BLUE), continued.—The action of 3d Squadron, with attached units, was carried out successfully. Colonel 13th Cavalry decided to withdraw the 1st Squadron, as it might be reinforced, from the right of the regimental sector and have it take up a delaying position on Machine Gun Ridge. This was done, and the 1st Squadron, as reinforced, took up its position on Machine Gun Ridge with Troop A on the right and Troop B on the left.



Overlay No. 3.

ELEVENTH REQUIREMENT.—Elements, if any, of the Machine Gun Troop attached to the 1st Squadron.

Employment (positions and fire missions) of the attached units in the position on Machine Gun Ridge.

TWELFTH SPECIAL SITUATION

A SOLUTION OF ELEVENTH REQUIREMENT.—The platoon of heavy machine guns in the 1st Squadron Sector, one liaison corporal, one messenger, one 37-mm gun, one antiaircraft car, four ammunition pack animals and the platoon of caliber .50 machine guns on the regimental reserve line were attached to the 1st Squadron.

Employment (positions and fire missions) of the attached units in the position on Machine Gun Ridge:

The platoon of heavy machine guns was placed near the 1,000-inch range to fire on any remunerative targets which presented themselves within maximum usable range.

The 37-mm gun was placed near the point where the road crosses the crest to fire on located enemy machine guns.

The antiaircraft car was placed on hill 1298 south of Machine Gun Ridge to furnish antiaircraft protection.

The ammunition pack horses were placed with the squadron led horses to furnish extra ammunition if needed.

The caliber .50 machine guns were placed two on Machine Gun Ridge and one each on hills 1298 and 1281 to fire on enemy armored vehicles.

SPECIAL SITUATION (BLUE), continued.—The action of the 1st Squadron, with attached units, was accomplished successfully. Colonel 13th Cavalry decided to withdraw the 2d Squadron, with his Machine Gun Troops (less detachments) attached, to a delaying position near the Reservoir. This was done and the 2d Squadron took up a position, with Troop E near the Reservoir and Troop F on the open spur 400 yards south thereof, with a combat patrol near RJ 1060 to cover the left flank of the squadron.

TWELFTH REQUIREMENT.—Employment (positions and missions) of the units of the Machine Gun Troop attached to the 2d Squadron.

THIRTEENTH SPECIAL SITUATION

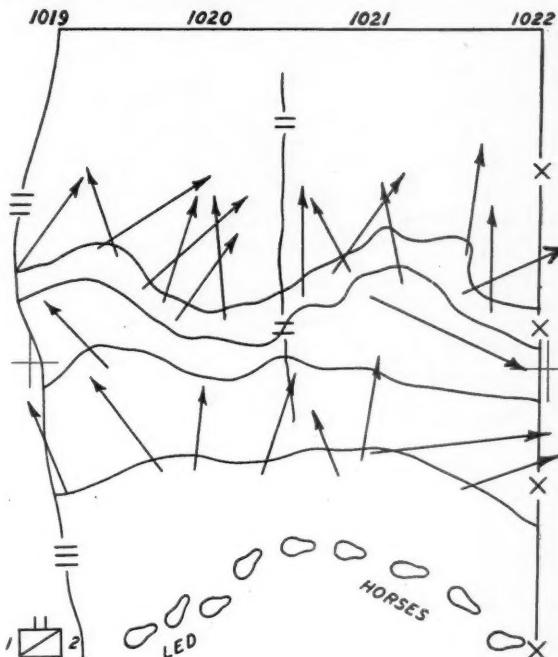
A SOLUTION OF TWELFTH REQUIREMENT.—The platoon of heavy machine guns and the 37-mm guns were placed on or near the Reservoir to fire on any remunerative targets which presented themselves.

The antiaircraft cars were placed 200 yards east of the Reservoir to furnish antiaircraft protection.

The ammunition pack horses were placed with the squadron led horses to furnish extra ammunition if needed.

The caliber .50 machine guns were placed, one just north of the Reservoir, one on the spur 500 yards southeast thereof, one at RJ 1060 and one at the road junction 700 yards southwest of the Reservoir.

SPECIAL SITUATION (BLUE), continued.—The action of the 2d Squadron, with attached units, was accomplished successfully. Colonel 13th Cavalry then withdrew the 3d Squadron and the 1st Squadron and the



Overlay No. 4.

caliber .50 machine guns and the two antiaircraft cars attached to them in turn over Engineer Bridge. He had the two platoons of heavy machine guns and the 37-mm guns previously attached to those squadrons revert in turn to the Heavy Machine Gun Troop. Red troops were then moving east on the low ground between Sherman Heights and the river with their leading elements about at the Pump House.

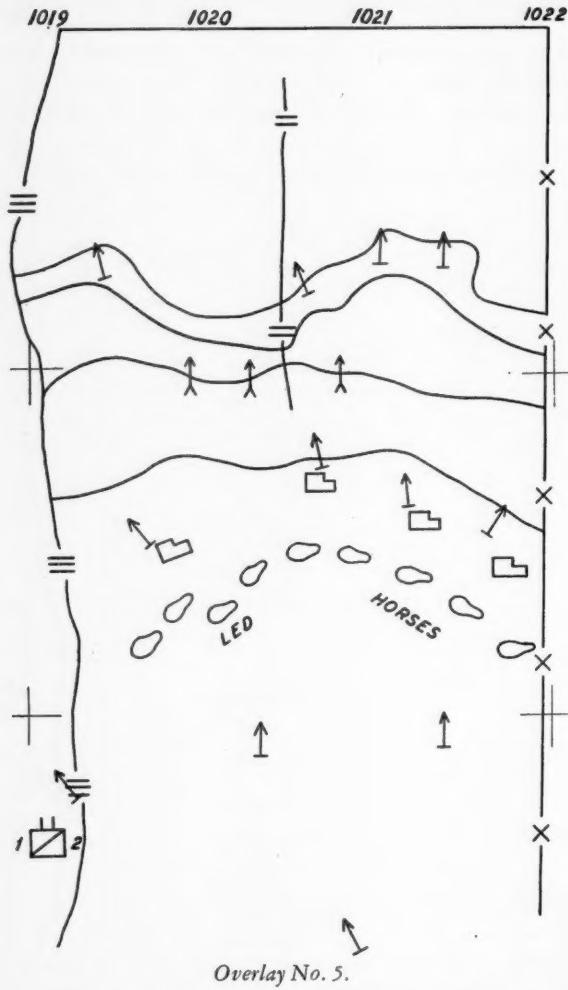
NINETEENTH REQUIREMENT.—Locations of the two extra machine-gun platoons and the two extra 37-mm guns in the position of the 2d Squadron.

Decision of Major 2d Squadron for the withdrawal of his squadron, to include his attached units.

FOURTEENTH SPECIAL SITUATION

A SOLUTION OF THIRTEENTH REQUIREMENT.—Major 2d Squadron placed one of his extra machine gun platoons and one 37-mm gun just southeast of the Reservoir to fire down the draw leading to RJ 1060, and the other machine gun platoon and 37-mm gun on the spur occupied by Troop F to fire on troops attempting to move around his left flank.

Major 2d Squadron decided to withdraw Troop E at once, followed by the elements of the Machine Gun Troops, via the Show Ring-Stadium-Engineer Bridge road. When these units are well away, to withdraw Troop F (less one rifle platoon and the light-machine-



gun platoon), to be followed later by the light-machine-gun platoon, the latter in turn to be followed by the last rifle platoon and the combat patrol and its caliber

.50 machine gun, via the Highway 40-Flagpole-Engineer Road bridge.

SPECIAL SITUATION (BLUE), continued.—The 13th Cavalry crossed the river over the Engineer Bridge without further incident. Colonel 13th Cavalry decided to bivouac for the night in the woods in the vicinity of Arkle near RJ 1087. He designated the 2d Squadron, reinforced, as the outpost for the night.

Major Outpost decided to establish three supports, consisting of one platoon each at Moritz, RJ 1150 and RJ 1087-A and an outpost reserve, consisting of the squadron (less three platoons), at R. Boller.

FOURTEENTH REQUIREMENT.—Attachment of guns, if any, to the outpost.

Disposition of all units of the Machine Gun Troops, if any, attached to the outpost.

Disposition of the light machine guns of the outpost troops.

A SOLUTION OF FOURTEENTH REQUIREMENT

A SOLUTION OF FOURTEENTH REQUIREMENT.—Attachment of guns, if any, to the outpost.

One platoon of heavy machine guns and one platoon of caliber .50 machine guns to be attached to the outpost.

Disposition of all units of the Machine Gun Troops, if any, attached to the outpost:

One section of heavy machine guns attached to the outpost attached to the support at RJ 1150 and the others held in the outpost reserve, with gun positions at all three supports and routes thereto reconnoitered for use if necessary.

One caliber .50 machine gun attached to each support and one held in outpost reserve.

Disposition of the light machine guns of the outpost troops: One light-machine-gun squad attached to each support and the others held in outpost reserve.

Notes from Cavalry R.O.T.C. Unit, New Mexico Military Institute

THE annual Corps Area Inspection was conducted March 3d and 4th by Colonel John F. Preston, Infantry, Civilian Components Officer, Eighth Corps Area, (formerly the Inspector General), and Lieutenant Colonel Harley C. Dagley, (Cavalry) I.G.D., Fort Bliss, Texas. A feature of the inspection was a review of the regiment with seven troops dismounted and two mounted. Favorable comment on both practical and theoretical training and on the facilities of the Institution was made by the board.

Authority has been granted by the Corps Area Commander to make a Cavalry march to and from Fort Bliss, Texas, as part of the six weeks' summer camp for advanced students. The route selected follows generally

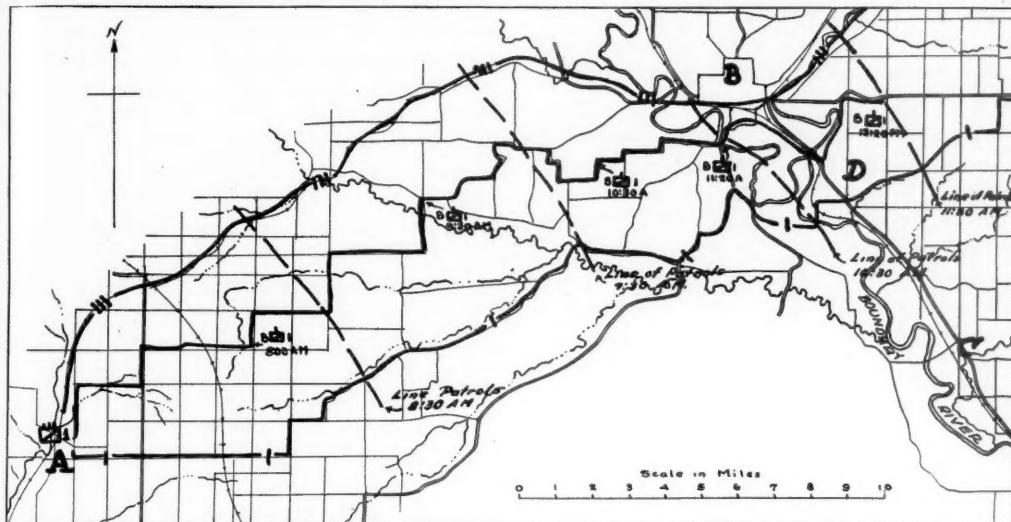
through the Sacramento Mountains. This form of training is expected to prove especially interesting and instructive to our future Reserve officers.

Polo and preparation for the spring horse show are held every afternoon following the drill period. Nearly every week-end witnesses a polo game with a visiting team, while the Institute Broncos plan to invade Oklahoma shortly to play both the University of Oklahoma and Oklahoma Military Academy.

The rifle team has completed the Corps Area Match with an aggregate score of 1931 (Possible 2000) which is four points higher than the previous year's total in spite of the fact that two of the best shots were unable to shoot on account of illness.

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NOTES FROM THE CHIEF OF CAVALRY



What Would You Do?

SITUATION

"Count Erry Connasance was certainly a leader in his field. From the story they tell me, he was so outstanding in his conception of the tactical employment of Cavalry that one of the Cavalry rôles was named for him. Even today his name is perpetuated in orders." So Captain Ped Antic opened his dissertation. "The Count was an outstanding go-getter who believed in getting a jump on his adversary by bold and decisive action. This he accomplished by strategical maneuver, always with secrecy and surprise.

"Of course, with modern impedimenta and equipment we eliminate some of the problems that the Count had. Now, for example, march tables and schedules, phase lines, locations of message centers, etc., are used. These elements, before the day of the map and mimeograph, had to be improvised with the limited means at hand. I cannot help thinking of this Count without recollecting vividly an application of one of his principles in the world's recent unpleasantness. With slight warning on one occasion I had to call on good old Count Erry Connasance to solve a situation. It went something like this:

"Our regiment, the 1st Kurra Seers, was stationed at A (see sketch), about 23 miles west of the Boundary River, which was the international boundary between the two states, Blue west and Red east. War had just been declared, and as may be supposed, large Red forces were concentrating about 50 miles east of the border. The concentration of a small force of Red Cavalry was some 15 miles closer. A Blue division was immediately mobilized in an area about 15 miles southwest of our garrison.

One of its brigades having finished its mobilization, received instructions to proceed without delay to the line B-C preparatory to an immediate invasion of Red territory in that vicinity.

"It was a cool day, the 20th of November, and at about four o'clock in the afternoon our Colonel, Meth Oddikel, received instructions that the Blue brigade to which our regiment had been attached would advance on the line B-C the next day, and that the 1st Kurra Seers would move early on the 21st to prevent hostile ground reconnaissance south of the line B-C until 8:00 A.M. on the 22d. The zone was indicated. We are interested only in the northern part as shown on the sketch with locations of phase lines and detachment message centers. Observation aviation was ordered to coöperate. Colonel Meth Oddikel decided to march the regiment at 7:00 A.M. on the 21st, preceded by two Count Erry Connasance detachments, on D. He detailed my troop, B, as the northern detachment, attached one section of heavy machine guns, one section of caliber .50's, one radio pack, one section of scout cars, and three intelligence scouts under regimental control. In addition, one section of scout cars was ordered to reconnoiter the normal zone of advance of the enemy. I received those instructions at 6:30 P.M. on the 20th. I almost forgot to mention—my detachment was to be responsible for lateral coöordination with the one operating to the south. March schedule data and other coöordinating factors I immediately placed on available maps. I then started on my detailed plan. In this situation

WHAT WOULD YOU DO?

SOLUTION

"Well, having in times of peace studied the theories of good old Count Erry Connasance, it seemed to me that there was not much to get excited about. At 8:00 P.M. I assembled my officers and noncommissioned officers. I explained this situation and informed them of my plan, distributing marked maps at the time. I went through the usual paragraph 1, and then—well, to quote my order, as it was recorded, I dictated:

'This troop will be Count Erry Connasance Detachment No. 2. Zone of advance as indicated on maps herewith. The troop marches tomorrow at 6:30 A.M. to the general line B-D via routes shown. Three patrols will precede as follows:

'Patrol No. 1, Sergeant Flexor, 1st Squad, 1st Platoon, one intelligence scout attached, will march at 5:50 A.M. along the route indicated as the south boundary of the detachment zone to high ground at the head of the creek east of D.

'Patrol No. 2, Lieutenant De Nigh, 1st Platoon, less two squads, with one-half squad, light machine gun platoon, and one intelligence scout attached, will march at 6:00 A.M. via the center route shown on the attached map to high ground approximately three miles north of D.

'Patrol No. 3, Sergeant Extensor, 3d Squad, 1st Platoon, with one-half squad, light machine gun platoon, and one intelligence scout attached, will march at 6:00 A.M. via the route shown as the detachment's north boundary to road bridge over creek approximately four miles north of D.

'All patrols will reach coördinating lines not later than the time specified and at places indicated. They will resist all attempts of hostile ground reconnaissance forces to break through the screen. Upon arrival at the final objective they will form a march outpost or stationary screen until relieved for the night. Positive or negative information will be reported to the troop message center at hours and locations indicated on the attached map.

'Should hostile forces be encountered too strong to overcome, delay will be attempted until the arrival of the main body of the detachment. Contact with hostile forces will be immediately reported to the detachment commander.

'The heavy and caliber .50 machine guns will march with the main body of the detachment. Scout cars will check the progress of the patrols and effect lateral coördination with the south detachment. In case of failure of scout car radio, messages will be sent by mounted messenger.'

DISCUSSION

"Even though the regimental commander seemingly designated all of the important features of this type of Cavalry rôle, you note that there are a number of things that devolved entirely upon me as troop commander," continued Captain Ped Antic. "Although essentially the

execution of a defensive mission will usually require the adoption of offensive measures, and although this rôle may be effected by the establishment of a stationary or moving screen, in the situation under discussion it was entirely a moving screen. I attempted to accomplish my mission by sending patrols along the most likely or possible lines of advance of hostile reconnoitering patrols and detachments. In situations like this where the road net was such that all roads could be covered without depleting my detachment so as to destroy its combat strength, I could send a patrol on each road.

"You note that counterreconnaissance patrols are not primarily agencies of information. Their chief mission is to discover hostile patrols and drive them back. In the event of encountering an enemy too strong for them, they must report that fact to the detachment commander, in the meantime delaying until supported by the main body of the detachment. Had I desired more information of the hostile reconnaissance force, that is, more than I felt that my patrols would be able to furnish me, I would have sent out reconnaissance patrols to gain that information.

"Colonel Meth Oddikel gave me a section of scout cars, which might have been used for reconnaissance, for repulsing hostile cars, and for connection between patrols, particularly on the phase lines. You note again that the Colonel took care of distant reconnaissance under regimental control.

"A thing about counterreconnaissance is that its detachments and patrols must be more closely coördinated than similar units on reconnaissance. Gaps in the screen which might be penetrated by hostile patrols must be prevented. The regimental order accomplished this by prescribing phase lines. Incidentally, in reference to these phase lines, there was no implication to prevent a patrol from reaching that line before the time indicated, but it did insure that none would leave the line ahead of the time specified.

"Note also that the message centers of the detachment were shown on the sketch. Thus the patrol leaders knew definitely where the detachment commander might be found at any time. Naturally at times other than those indicated the patrol leader knew that the commander could be found en route on the road announced in the order, which in this case was the same as that of Patrol No. 2.

"So I reiterate that old Count Erry Connasance was quite a man. For without expounding his principles we might all be dashing around the country gaining information without considering the importance of denying information to our enemy." (Department of Tactics, the Cavalry School.)

The Cavalry School Keeps Pace With the Times

THE increasing frequency with which officers of the service are being called upon by civilian organizations everywhere to give talks and make public addresses has made apparent the necessity for increased training of

officers in this respect and in speaking into a microphone.

The Cavalry School, to meet this situation, this year installed microphone and loud-speaker equipment in the classroom where student classes delivered their required three-minute, ten-minute and longer speeches. The classes were so arranged that the speaker addressed a portion of the class direct and the remainder listened to the speech in another classroom, through the amplifier.

As a project for the school year 1936-37, it is contemplated that student speeches be electrically recorded upon ediphone equipment, thus enabling the student, following his address, to hear his speech as it was recorded.

Experiments this year wherein loud-speakers were placed in the offices of the Assistant Commandant and certain department chiefs have made apparent the possibilities of microphone and loud-speaker equipment in connection with all classroom instruction at the Cavalry School. It is contemplated as a future project to equip the offices of all instructors of the Academic Division with small loud-speakers. Thus any instructor could tune in at his convenience on any conference being given, this, of course, being an additional consideration to that of the experience being gained by officers delivering conferences, students delivering talks, etc., into the microphone.

Horse Activities at Fort Meade

BY 1ST LIEUTENANT CHARLES P. BIXEL, 4th Cavalry

EQUITATION

EARLY last year the new post riding hall, which had been serving since the advent of the C.C.C. as a warehouse for that agency, was cleaned out, and work started on preparing it for riding. The work was completed in the fall and since that time the hall has seldom been empty.

Four equitation classes have been conducted since November 1st; three for the non-commissioned officers of the three squadrons which meet twice a week, and one for all officers below the grade of captain, which meets three times a week. Each of these classes is conducted by an officer, and follows a schedule of instruction prepared previous to the beginning of the course. The schedules include the five months' period from November 1st to March 31st, inclusive, and are based on the theory that each student starts with a young, fairly green horse of possibilities, and some blood, developing the horse as well as his own riding during the course of instruction.

In addition to the classes already mentioned, which may be termed official, and at which attendance is compulsory, two other classes were organized voluntarily. The first of these, a green polo class, meets twice a week the time being devoted to the training and checking of polo prospects which are being brought along by individual officers interested in the game. This class has proved successful chiefly because it has largely overcome the natural tendency to wait until polo weather to start building up the polo string. Several likely prospects are being developed.

The second unofficial class organized was for the ladies and children of the post. It meets on Saturday afternoon, and has done a great deal to encourage riding among the families of the garrison, as well as to improve the riding of those already interested, as evidenced by their performance in our post horse shows. The instructors of the various classes are:

NCO Equitation, 1st Squadron, Captain George W. Busbey.
NCO Equitation, 2d Squadron, Captain Wm. S. Biddle.

NCO Equitation, Provisional Squadron, Captain John H. Stodder.

Officers' Equitation, 1st Lieutenant Charles P. Bixel.
Ladies' and Children's Equitation, Captain Wm. S. Biddle.
Green Polo, Captain George W. Busbey.

WINTER HORSE SHOWS

As a test of the progress of these classes and with the idea of promoting interest in horsemanship by introducing the element of competition, a series of four monthly horse shows was decided upon, the conditions drawn up, and a bulletin published in November, so that those interested could know what to work on. The classes were designed to permit each and every person on the post to enter some event. Further, the shows were designated to be progressive, to tie in as far as possible with the state of training of the various equitation classes, and to demand a little more of the horse and rider each time, both in height of obstacles, and in difficulty of courses from a maneuvering standpoint.

The shows were not confined to jumping. Exhibition rides, schooling, polo classes, saddle classes for the ladies and children, and comic relief in the form of mounted wrestling and potato races have all been included in what we consider a well rounded program of practical horsemanship. The aim in view is being accomplished to a marked degree; i.e., the general level of riding in the regiment has improved, and young horses are being developed. More important still is the active interest in things pertaining to the horse and his management which has been awakened among the personnel of the garrison.

TRAINING REMOUNTS

Late in October a consignment of twenty remounts was received at this station from the Remount Depot at Fort Robinson, Nebraska. With three exceptions, they were half-breeds or better, and although a bit small, were excellent type Cavalry horses.

When the usual three weeks' quarantine period had elapsed, they were started on their road to education,

under the supervision of 1st Lieutenant Charles P. Bixel and a detail of seven riders. Each man was assigned three horses, working two in the morning and one in the afternoon. Assignments to riders were made by lot and color; that is, each man was cautioned to bear in mind the color of his troop horses, when he made his choices. Consequently, when the animals were turned to duty, each man on the detail was able to take at least one horse to his organization.

The schedule of training, prepared in advance, covered a ten weeks' period and followed in general T.R. 360-10, "Training Remounts," with some variations necessitated by the conditions existing at this station. Each man on the detail was told at the beginning of the work that there would be a competition at the end of the course in which he would show his best horse, the winners to receive cash prizes. The horses were to be judged on the following basis:

Training test	200
Jumping test	100
Appearance :	
Grooming and conditioning	50
(Not conformation)	
Total	350

It is believed that the element of competition, introduced at the very beginning, made for a more personal interest in his animals on the part of each man.

When all horses had been led, longed, saddled and mounted; that is, when they could all be ridden without too much difficulty, a definite system of rotation of work was inaugurated. Each man designated his horses as No. 1, No. 2 and No. 3, in order of tractability. For a short time he worked Nos. 1 and 2 in the morning, and No. 3 in the afternoon, as more time was available during the

latter period. Later, however, when all horses had settled down to a reasonable degree, the morning periods were spent in schooling and the afternoon periods in long slow conditioning rides, calculated to build up muscle, bone, wind, and docile temperament. Animals were rotated regularly from one period to another, so that they not only all had the benefits of the schooling, and conditioning, but all became accustomed to working at different times of the day. Wednesday and Saturday mornings were devoted to training in jumping, each horse spending an hour on this work. On Sundays and holidays all horses were given a complete rest, being turned loose in the corral on half rations of oats.

Much of the work was done under very unfavorable conditions, climatically speaking. For a month the thermometer never rose above zero, and a great deal of time it fluctuated between 6 and 25 degrees below zero. Usually these severe temperatures were accompanied by the winds for which South Dakota is famous. On the worst of these days periods were shortened somewhat, and the riding hall was used whenever possible, but all animals were worked every day except when on sick report.

At the end of the course the commanding officer inspected all remounts, and the competition mentioned above was held. The training test consisted of a sequence of twenty simple school movements; and the jumping test of eight 3 foot jumps to be taken as a course. All animals shown performed very creditably, and several outstandingly well, especially over the jumps. All that remained was to award prizes to winners, and to assign animals to organizations. Both were done at once, the assignments being made by color, based on animal strength of troops. And so the remount stable became history.

Battlefield Mobility

BY COLONEL JOSEPH A. BAER (Cavalry) G.S.C.*

CERTAIN military axioms and precepts are continually quoted in discussions on tactical questions. We hear of:

- Mobility;
- Thorough reconnaissance;
- Skillful use of terrain;
- Early development of maximum fire power;
- Fire and movement;
- Rapid advance to avoid losses;
- The determination to assault.

Too frequently we merely render lip service to these basic principles. We take them for granted and fail to apply them intelligently. Modern improvements in matériel require the development of new technique. We must readapt our tactics to meet modern conditions and to fully utilize our own newly developed weapons.

The basis of the effectiveness of Cavalry is its mobility. But, when we speak of mobility, do we consider the difference between strategic mobility and tactical mobility? Under favorable weather and terrain conditions, the strategic mobility of the Air Force or of Infantry in trucks surpasses that of Cavalry. But, in the tactical mobility of ground troops; that is, mobility near and on the field of battle—battlefield mobility—Cavalry is still the leader. Battlefield mobility begins where the truck trains are detrucked. It extends into the immediate zone of combat. It implies speed in going into action, speed in developing fire power, speed in the advance, mounted or dismounted, and speed in the assault.

Battlefield mobility insures choice of time and place of attack. With intelligent leadership, the inherent, organic mobility of Cavalry in every type of terrain permits it not only to assume the offensive, but also to take

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the offensive away from the enemy and make him fight according to our will, not his. This holds either in a "carefully prepared attack" or in an action initiated merely by a decision to "attack now."

Thorough reconnaissance is necessary to formulate an adequate plan. But how often commanders have made slow and thorough reconnaissance, even reconnaissance in force as was practiced in the Civil War, the sum of the information gained being that the enemy was giving him a thorough beating. A skillful enemy will change his dispositions rapidly and launch an early attack that will force a thorough but slow moving leader to fight as the enemy has planned. The enemy's dispositions of half an hour ago have always vanished. Moreover, the element of chance can seldom be eliminated. The leader who has the courage to commit his unit after gaining sufficient information to give himself what seems an even break, is the closer to victory. If the enemy can't make up his mind because of lack of *complete information*, the early attack will win. If the enemy has set his own offensive plan in operation, there is no time for thorough reconnaissance, and either a hastily prepared attack must be launched or the opportunity to take away the initiative from the enemy will be lost.

How can we safely cut down the time of the reconnaissance? A forward position of the commanding officer in the advance will do it. Offensive Cavalry action calls for advance by bounds from cover to cover. *When combat is imminent*, the main body in battle formation should be preceded by a "covering force" personally directed by the commanding officer. From his forward position the commanding officer takes advantage of all terrain key points to insure the best covered approach, and chooses terrain best suited to his attack. Early first-hand observation permits him to refuse to use open, fire-swept zones in approaching the line of departure without loss of time or that measure of fatigue which would wear out dismounted men. He alone is responsible for every decision and, from his forward position, he can make them from what his own, not some subordinate's, eyes see. Having been forward and having made his decision, he saves precious time in setting everything into action to launch his attack. Ten minutes advantage may spell the difference between victory or defeat.

The main body in the approach should be in a state of complete readiness for battle. The formation should be such as to permit the development of maximum fire power from the start of the action. This is necessary in order to keep the enemy pinned to the ground while we maneuver. Moreover, the formation must be such as to provide the maximum number of men for the assault, a rapid advance to the assault, and speed in the assault. This was Forrest's precept.

Machine guns left in the maneuver echelon as an integral part of small units will not be able to go into action in a rapid advance for if they open fire they will slow down the advance. Only those guns in the leading wave can fire; those in successive waves will rarely be in a po-

sition to render fire support. A machine gun in pack or in the process of being advanced dismounted, when within effective range, is a machine gun wasted. This applies to both the water cooled and the light machine gun.

A rifleman in the fire echelon firing at ranges beyond 300 yards is a rifleman wasted for he can hit only what he sees and, with slight cover, a dismounted enemy is invisible beyond 300 yards. Such a rifleman would be of more value in the maneuver echelon, for the assault, because victory is insured by having superiority at the immediate point of attack. Terrain and circumstances may require Cavalry to attack without room for maneuver while its machine guns are pushed forward with the dismounted riflemen. But, such an attack is not characteristic of Cavalry and could best be delivered by troops equipped with automatic rifles, one man guns as inconspicuous as rifles, instead of machine guns requiring vulnerable teams of from 3 to 5 men. Machine guns, especially the light machine guns, can be attached to the maneuver echelon to establish advanced secondary fire pivots thus extending the primary fire echelon, for pursuit fire or for hasty consolidation of a position taken. But this use of machine guns must be considered and handled as a detached supporting fire echelon.

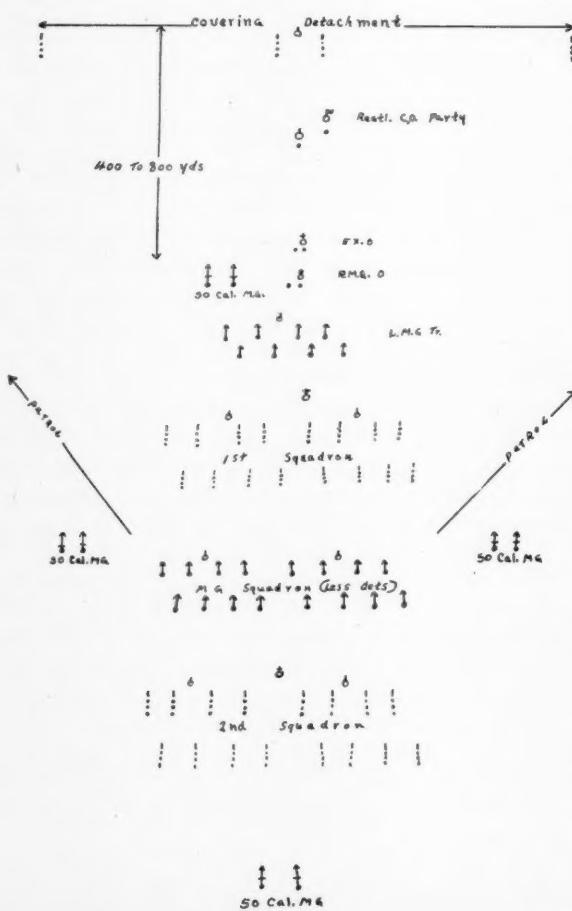
The solution for Cavalry is a fire echelon composed of all available machine guns able to put down its maximum mass fire without delay, and a maneuver echelon composed of all available riflemen trained to advance with the maximum speed to the assault. When the situation permits, the assault should be made mounted with pistol—the pistol attack. Losses will be less severe in a pistol attack under favorable conditions than in a slow, painstaking, dismounted advance. The shorter time a unit is under fire, the less will be its losses. When the situation does not permit of the mounted attack, the approach of the maneuver echelon to the line of departure should be a rapid mounted approach, followed by a rapid dismounted advance of unencumbered riflemen to the assault position and an early, determined assault. Under all situations the maneuver echelon should, from the start of the action to the final assault, be supported by the maximum fire of which the fire echelon is capable.

Early during the training year 1934-35, it became evident in the 1st Cavalry Division that Cavalry must be trained to think *speed* and to act with *speed*. In the daily training, *hasty action* was practiced as a drill. This took the form of launching unprepared attacks to meet an enemy's surprise attack or to gain the initiative as a fleeting opportunity presented itself. In this training it was found necessary to simplify the machinery of command in order to facilitate reconnaissance, to organize the fire echelon in time, and to release the movement or maneuver echelon promptly.

For troop, squadron and regimental exercises all machine guns pertaining to the unit conducting the exercises were formed into a fire echelon and all riflemen were released to the movement echelon. The machine gun

organization was improvised. It proved difficult to assemble machine guns under the stress of maneuver conditions and preserve the requisite of speed. To meet this, the rifle squadrons were organized into three troops, two rifle troops, and one light machine gun troop formed of the two light machine gun platoons. When the regiment formed for field exercises all machine guns, light and heavy, were formed into a squadron of three troops, one heavy and two light, commanded by the regimental machine gun officer. This organization, though imperfect, obviated the necessity of assembling the guns after the start of an action. On the other hand, when a separated rifle squadron required machine guns, it was a simple matter to attach to it a platoon or troop of machine guns from the machine gun squadron.

Within the regiment a few simple formations were developed which fit well into the requirement of complete readiness for battle. When information from patrols, scout cars, or airplanes indicates the proximity of a hostile force, the regiment is developed from route column preceded by an advance guard, into an approach battle formation preceded by a covering force, one type of which is shown diagrammatically below.



One type of covering force.

The regiment is generally developed into this formation by two deployments. The first deployment is from route column to an approach formation. (Column of platoons in line of half squad column.) Column of squadrons is then formed. (Line of troop columns of platoons, in line of half squads at 20 to 30 yards interval, depending on the type of enemy fire expected.)

A platoon is generally used as a covering force for the regiment. A half squad patrol is sent to either flank and the remainder of the platoon is held in a central group, in line of half squad columns, under the platoon leader. The flank patrols go out far enough to cover terrain not easily reconnoitered by the central group, generally at least 800 yards distant. The regimental commander accompanies the covering force, directing it from bound to bound in the desired direction.

The regimental executive officer and the regimental machine gun officer, with their parties, at the head of the regiment follow the covering force at 400 to 1000 yards. A light machine gun troop is generally at the head of the column of squadrons. It consists of the platoon ordinarily attached to the advance guard and one that normally may be at the head of the route column. With anti-tank guns covering the approach of armored cars and with flank patrols well out, the regiment is in a flexible formation easily controlled and ready for rapid action in any direction, yet, sufficiently dispersed as to offer only unprofitable targets to hostile machine gun, airplane, or armored car attacks.

From his forward position with the covering force the regimental commander personally conducts his regiment in this battle formation. The regimental commander points out a position or area to which he directs the leader of the covering force to bound. The covering force advances at the gallop to the terrain feature or area indicated and waits for the regimental commander while making its reconnaissance. The regimental commander follows as soon as it is apparent that the covering force has not drawn hostile fire during its bound. He then gallops up and joins the covering force. He is thus able to get all information at first hand. At each bound he orders such further rapid reconnaissance as he deems necessary, directs the covering force to its next bound, and chooses terrain favorable to the advance of his regiment. The main body of the regiment, led by the executive officer, follows at a steady gait or by bounds, depending upon the cover or lack of it.

When from his own reconnaissance the regimental commander decides to launch his attack, he gives final reconnaissance instructions to the leader of the covering force and gallops back to his regiment, signaling the flank toward which he intends to lead his maneuver echelon. The regimental executive forms the two rifle squadrons to the flank indicated. The regimental machine gun officer rides forward to receive his instructions, generally sending word to the machine gun squadron to move so as to clear the column. The regiment is thus

quickly developed into a fire echelon and a movement echelon.

The regimental commander acquaints the machine gun officer with the enemy situation and with his own plans. He indicates the area from which he wants fire support and the route of advance of the maneuver echelon. The machine gun officer is then responsible for the fire support. A light machine gun troop may accompany the maneuver echelon when a secondary fire echelon can be established to advantage.

The regimental commander's action now depends upon the situation. The situation may be clear enough to call for a deliberate attack. In this case, the regimental commander designates a reserve, a commander of the movement echelon, points out the line of departure and sets the attack into operation. From his position with the fire echelon he insures maximum support for the assault by fire and by action of the reserve. In no case should the movement echelon be led into possible hostile fire before our own fire echelon has organized and put down our supporting fire.

The enemy may have been discovered with his units dispersed beyond supporting distance, or a terrain key point must be taken before the situation in rear can be cleared up. In other words, the situation calls for hasty action with fire support. In this situation the regimental commander leads the movement echelon by bounds to the line of departure in much the same manner as the regiment was led. The covering force in this instance is light. Upon reaching the line of departure, the assault squadron is launched into the attack. The second squadron, led by the regimental commander, follows it until he decides to launch it either in support of the assault squadron or to meet a new threat. Action against Cavalry will as a rule be of this nature. The regimental commander should retain personal leadership to the last possible moment in order to initiate action to meet unforeseen changes in the enemy situation.

If the enemy is found in small harassing units cover-

ing a wide area, it may be best to "steam roller" rather than attack by combined action. In such an attack the machine gun squadron forms a third wave behind the line of rifle squadrons, the gunners executing pistol attack, and the guns and packs following closely. The regiment thus rides through and crushes enemy opposition. This formation could be used when the regiment is surrounded and must cut its way out.

These formations can be taken up simply and rapidly. They are very flexible and reduce the length of the column to one quarter of the route length. The regiment is in hand ready for anything in any direction. The difficulties of command for the regimental commander are reduced to a minimum. These formations are subject to variation at the discretion of the leader. But they must all consist of a covering force behind which the commander makes his own reconnaissance and a flexible battle formation that upon signal forms two echelons, a fire echelon and a movement echelon. This holds for the squadron acting alone or for the troop acting alone as well as for the regiment.

It was found that the regimental machine gun officer needed a trained staff to control the movement and fire of this mass of machine guns. It was also found that an extemporized staff didn't work well. Therefore, for the 1935-36 training year, all machine gun units in the regiment were organized into a provisional machine gun squadron for all technical training and tactical exercises. The regiment trains with a two echelon formation, a *fire echelon*, and a *movement echelon*, properly organized, adequately staffed and thoroughly trained.

In the training of the troop, squadron or regiment, there are four principles that must be carefully developed: leadership by the commander; maximum mobility; maximum fire power; and willingness to assault. We must not merely dream of it, we must train in mobility, think speed, and drill in hasty action. Battle is Cavalry's primary rôle and mobility is its road to victory—battlefield mobility.

Horse Show Calendar

April 17-18—New York Spring Horse Show, New York.

April 23-25—Brooklyn Horse Show, Brooklyn, N. Y.

May 7-10—New Haven Horse Show Association, Inc., New Haven, Conn.

May 7-10—National Capital Show Association, Bradley Farms, Md.

May 12-16—Atlantic City Horse Show, Atlantic City, N. J.

May 25-30—Devon Horse Show, Devon, Pa.

May 27-30—The Cavalry School Horse Show and Race Meeting, Fort Riley, Kans.

June 3-4—West Point Horse Show, West Point, N. Y.

June 5-6—Harrisburg Horse Show, Harrisburg, Pa.

June 5-6—Tuxedo Horse Show Association, Tuxedo Park, N. Y.

June 7—Westchester County Horse Show, Port Chester, N. Y.
(Olympic Exhibition.)

June 11-13—Westchester County Horse Show, Port Chester, N. Y.

June 14—Sands Point Horse Show, Sands Point, L. I.

June 18-20—Field Artillery Horse Show, Fort Sill, Okla.

June 19-20—Plainfield Riding Club, Plainfield, N. J.

June 18-21—Troy Horse Show, Troy, N. Y.

June 21—West Terrace Riding Club, Danbury, Conn.

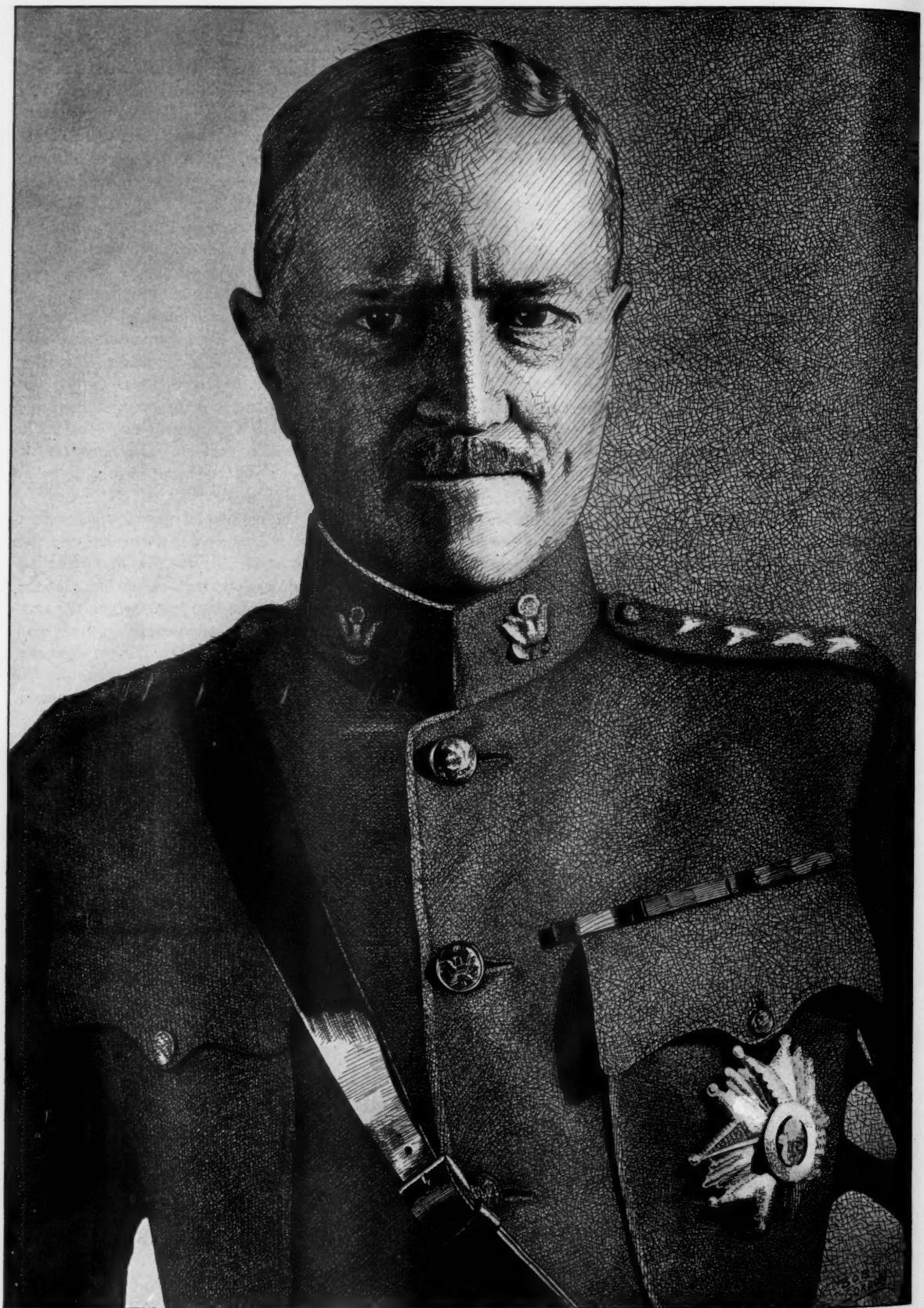
July 30-August 1—Monmouth County Show, Rumson, N. J.

August 6-7—Bath County Show, Hot Springs, Va.

August 20-21—Clarke County Horse and Colt Show, Berryville, Va.

November 4-10—National Horse Show, New York, N. Y.

December 3-6—110th Cavalry Show, Boston, Mass.



GENERAL JOHN J. PERSHING.

Pershing and the Anvil Chorus

By H. A. DEWEERD

"The Americans are an extremely credulous people. I can liken them only to the Chinese."—Lord Northcliffe.

ON July 9, 1918, that sagacious old soldier Tasker Bliss, who had been hearing the general chorus of praise for the American action at Château Thierry, wrote to Pershing: "It occurred to me that it would be a good thing to quietly put on record such statements. . . . There may be a tendency a year or so from now to minimize the credit which at the moment they gave to our troops."

The old soldier was right, for the last shot had scarcely been fired in the World War before a systematic campaign was instituted by the erstwhile allies of the United States to discredit the American military effort. This has become so common that one has to study foreign military works with a reading glass in order to discover that we were actually one of the belligerents. Our final rank as a decisive factor in the struggle seems to be right along with Portugal and Serbia. American editors have unwittingly assisted in this shrinking process by insisting that their readers view American military men and efforts largely through the eyes of European critics. Thus it is that Pershing, Hunter Liggett, Harbord, and other typical American military men, have been tagged and labeled by a facile corps of European special pleaders. The same mildly fantastic results would ensue if Cosmo Gordon Lang were to hold forth from the sterile fog of Canterbury on such a typical American religious phenomenon as the late Reverend Billy Sunday.

Admiral A. T. Mahan, who enjoyed an international reputation as a naval historian, once described his fellow Americans as being "aggressive, combative, and even war-like—but out of sympathy with military tone and feeling." From first to last our wars have been waged with the rough and ready improvisation common to democracies in distress. Lest the reader with justifiable indignation pass up this article as just another one of those stodgy appeals for preparedness, I should like to state that a long study of the military mind at work enables me to contemplate the traditional American attitude toward preparedness and "military tone" with complete serenity of mind. I only want to make it clear that there was something *very* unconventional about the situation in April, 1917, which required the transformation of a few thousand troops, who were causing the Secretary of War great distress on the Mexican border, into a triumphant independent army in France. To expect the "spit and polish" critics of Europe to sit in judgment on the accomplishment of this wildly impossible task, is obviously asking too much.

Laclede, Missouri, claims to be the birthplace of J. J. Pershing. Under what remained of frontier conditions, young Pershing worked his way up to normal school

and from there to West Point. As an officer of the 10th (colored) Cavalry regiment he showed an ability to put subordinates in their place, if necessary by sheer fist power, and became widely, if not affectionately, known as "Black Jack." He served with distinction against the Apache tribesmen, against the Spanish at Santiago, and against the Moros in the Philippines. During the Russo-Japanese War he was one of the few American officers to observe *grande guerre* in Manchuria. He was commanding a brigade in San Francisco when the Mexican difficulties caused his assignment to the border. This stroke of fate led directly to his later commands, but it also dealt him a staggering personal blow. While he was hunting for a house in El Paso, news reached him that the military headquarters at San Francisco had burned to the ground and that his wife and three daughters had perished in the blaze.

Pershing came out of the Mexican trial, a hard, taciturn, competent major general. When President Wilson and Baker were looking for a commander of the A.E.F. they selected Pershing "solely on his record" and raised him to the rank of full general. Once having chosen their man, they avoided the mistakes that Lincoln had made during the Civil War by giving Pershing a virtual *carte blanche*. He was allowed to choose his own officers and to assist in the preparation of his written instructions. No American general ever set out on a campaign with better backing at home. Aside from the lack of an army, Pershing had every possible chance of success. Secretary Baker said in effect: "If you succeed, all will be well; if you fail, the public will probably hang us both to the first lamp-post."

* * *

Although the military experience of the American commander was still small when judged by the European standards of 1917, it was more varied than that of the average European brass hat. He carried the most soldierly figure and the most imposing chin in Europe. If he lacked experience, he none the less demonstrated a notable vision and a remarkable elasticity of mind. No other statement will fit the case.

Pershing's early observations on the ground confirmed his decision to operate an independent army in the southern sector of the Allied line in France. The preparations for this plan, and the immense task of building harbors, bases, railways, factories, and storage plants, make a long story which has often been told. It is an account, however, which Americans should never lose sight of; for it is the sort of thing which may have to be done again in some future emergency. The work was costly but, in the main, well done. No twisting of the evidence available will serve to rob Pershing of the credit he deserves for this immense administrative achievement. The European soldiers watching this performance, and remembering the

mildly astonishing reports of military attachés describing our pre-war army, were confident that we had few or no tried officers, that we could not raise troops, train them, and learn staff work at the same time. "Against them stood only a rather inarticulate national pride, and the stubborn conviction of the professional soldier that we could succeed."

To those who were interested in seeing how the new commander bore up under the increasing problems of command, Pershing seemed to take on mental stature daily. So did Harbord. When the French, eager to put him in swaddling clothes, suggested all manner of French staff assistance, they met a stone-wall refusal behind a "heart-hiding smile." The American staff soon had plenty of opportunity to gauge the French officials. Occasionally they treated American officers with an air of tolerant superiority generally reserved for dealing with disagreeable minors. It finally became necessary for General Pétain to circularize the French army to the effect that the Americans were a proud and sensitive people who would not tolerate the "patronizing attitude commonly displayed toward them."

From the European point of view Pershing took far too much time to get his army ready. Some writers have cynically referred to our military effort as "fifteen months fighting in the rear and two months fighting at the front." When the driver of an army Ford ran down a wounded French soldier in the Place de la Concorde, one heard the observation that the American army had started killing Frenchmen before it killed Germans. Other leaders might seek to win the war in any way possible, but "Pershing wanted to win it with an American army stamped by the Pershing seal." With the perfectionist tendencies of a true West Pointer, he wanted the democratic army of the new world to out-soldier the veterans of Europe. Discipline in the American army was noticeably more severe than in the French and British service; European officers asked each other scoffingly whether Pershing contemplated adopting the goose-step. When he decided upon the large combat division many experts were certain that our improvised officers could not handle such large units. They heard of his enthusiasm for "open warfare," for the "offensive spirit," and for the "supremacy of the rifle" with ill-concealed amusement.

As the demands of his program grew, General Pershing became increasingly brisk and unyielding. He had certain warm and human qualities, "but these appeared less and less frequently as he became absorbed in the machine he created and drove." His smile seldom lingered more than a moment, and his handshake became short and perfunctory. Officers and men might not like their grim commander but they gave him a grudging sort of admiration. He demanded the utmost punctuality of every officer, and yet he fell down flagrantly himself on the matter of keeping engagements. It is said that he kept nearly every important person in Europe waiting for him at one time or another. Our allies took their revenge by letting lesser American officers cool their heels in wait-

ing rooms. Divisional generals in trench sectors raged at his order to visit the trenches at least once a week. Frederick Palmer heard one of them storm: "I would like to tell the damned fool at headquarters who wrote that order what I think of him." But he pulled his boots on—and went.

* * *

To some European officials who were eager to sell us dead horses, it appeared that Pershing's conception of the duty of the American commander was to return a curt "No" to all Allied requests. In some cases he seemed to refuse their requests before he heard what they had to say. The wisdom of his stand on the question of amalgamation is now generally accepted, but at the time immense pressure was put upon him to agree. The proposal to use American troops as drafts in the British and French service appeared under numberless forms, but Pershing seemed to be able to penetrate them all. With Yankee bluntness he asked General Robertson why the British were undertaking offensive operations in Palestine if they were so deeply concerned over the safety of the Western Front.

When disasters befell the British and the French in the spring of 1918 the pressure on Pershing greatly increased; even General Bliss was carried away. On May 8, 1918, the combined force of Allied prime ministers and generals assembled to make the final assault on the American commander. One can readily envisage the scene: Clemenceau with his walrus moustache and grey gloves, Lloyd George with his theatrical mane of hair, Lord Milner in a faultless cutaway, Foch with his nervous jerky speech, Signor Orlando with the diffident manner of a trained undertaker. When this battalion of argumentative shock troops worked up to a crescendo, Foch triumphantly rasped out: "Are you willing to risk our being driven behind the Loire?" Crisply, suddenly, and like a good poker player Pershing said, "Yes." This took the wind out of the marshal's sails for a moment, but the pack led by Lloyd George set on him again with driving argument. Finally, when he had had enough of it, Pershing arose, thumped the table and said with the greatest possible emphasis: "Gentlemen, I have thought this program over very deliberately and I will not be coerced!" That ended the meeting. General March later observed that he never had to thump the table to get his way, but it must be said he never had to deal with so many vocal artists at one time.

The thing that hurt the European leaders most about Pershing's invincible "obstinacy" in the matter of amalgamation was his frequent reference to the low state of Allied morale as a reason against the proposal. The Allied generals were quick to point out that Pershing mistook cynicism, born of experience, among the Allied troops for failing morale. They asserted that the eager American troops only had to tear their guts out on the German wire and machine guns to know this feeling. Pershing could not understand the "Sandhurst stoop" of British officers and viewed with a critical eye the none-too-soldier-

ly rank and file which survived "victorious" attrition of the general staff. The honeymoon period of the war was now over and the Allies savagely ridiculed each other. One British captain of three years service on the Western Front wrote:

"The French troops sneer at the British now, and the British at the French. Both had the same derisive note in the voice when they named the "Brave Belges." Canadians and Australians had almost ceased to take pains to break it gently to us that they were "storm troops"—that out of all us sorry home troops only the Guards division, two kilted divisions, and three English ones could be said to know how to fight."

The average American soldier would never have endured amalgamation. There is a telegram in the archives of the A.E.F. in which the commander of one of the best American divisions in the Argonne said if he were asked to fight again in liaison with French divisions, he would resign. A British major general once made the mistake of asking a wounded American who had served in the British area with the American 27th Division how he got on with the British. No Hollywood actor could have registered contempt more satisfactorily as he replied: "The British! Why them suckers drink tea!"

It was really too bad for the legend of Allied military superiority that Nivelle should smash up the French army so soon after we entered the struggle, and that Haig could not be restrained from making his stupid and murderous offensive in the mud of Passchendaele. The British disasters of March and April of 1918 cut down their air of military superiority considerably, and after Caporetto nothing was heard from the Italians but plaintive appeals for help. The French had to wait until May, 1918, for their supreme military humiliation on the Chemin des Dames; but when it came it was a real "facer." To make matters worse American intelligence officers had given the French clear warning of the impending stroke, but they ignored it. The same was true of the British warnings to the French at the time. The French retreat became a virtual marathon in which they left bridges and roads intact for the enemy. A day or two after this amazing collapse, M. André Tardieu took it upon himself to badger General Pershing about certain deficiencies in the American staff which had been called to his attention. At this untimely bit of impudence, Pershing cast aside restraint and told the startled Frenchman in good frontier fashion that the American army was fed up on silly French criticism and that to judge from recent events they had plenty of work to do at home. When he wanted to, Pershing could turn off a sentence that had the kick of an army mule. In the main he got along best with General Pétain who was also as blunt as a dull axe.

Foreign critics have been especially outspoken on what they describe as General Pershing's narrowness of view. General Sir Frederick Maurice in reviewing Pershing's *My Experiences in the World War* observed that some of the American commander's comments "seem singularly naïve and lacking in understanding." Captain B. H. Lid-

dell Hart is of the opinion that Pershing "revealed strange limitations of outlook and knowledge in a man cast by fate for so big a rôle." Yet the impartial muse of history (when she finally gets around to it) may well show that Pershing had a better grasp on reality in 1917-1918 than most Allied generals. Long before they were willing to do so, he had written Russia off the books as a dead loss. He did not foresee Caporetto, but it confirmed his worst fears. He alone seemed consistently willing to risk the possibility of a German break-through in 1918. To all complaints as to the lateness of the American effort, he could and did reply that it was largely due to the failure of the Allies to provide the artillery and tanks they had promised and to their insistence on shipping nothing but American machine gunners and infantry during the critical months of 1918.

* * *

As a soldier Pershing professed a strong faith in an army trained for open warfare and placed extreme reliance on the rifle. He was a tireless advocate of the offensive, and all officers who did not fall in with this program were mercilessly weeded out. Before the grim experiences of the Argonne—and even after—he spoke as if the *offensive brutale et à l'outrance* were a new doctrine and had not been exploded in 1914. When he was finally ready to fling his divisions into the battle "he had omitted but one factor from his calculations—the German machine guns—and was right in all of his conclusions save one—their effect."

It had long been agreed between Foch and Pershing that the American army should try its hand out in reducing the Saint Mihiel salient. This must be taken, therefore, as Pershing's first great solo performance. Little episodes like Cantigny, Belleau Wood, Château Thierry, and Villers-Cotterets were merely incidental bits of military benevolence in the interest of the Allied cause. The American commander, naturally eager to ensure the success of his first major venture, concentrated enough force to storm two such areas. The easy victory that resulted afforded the French and British critics the opportunity to refer to this operation as "breaking an egg with a steam hammer." Clemenceau passed the limits of understatement, however, when he described the Americans as "victoriously following in upon the heels of the departing Germans." Pershing neatly returned the compliment by stating that from the standpoint of raising Allied morale, this was the most important battle of the war.

Unhappily for Pershing the American army was not allowed to press its attack in the direction of Metz, for Foch and Haig had come to the conclusion that it had better be put to work cutting wood in the Argonne Forest. The fact is Foch had greatly disconcerted the American commander on the eve of the Saint Mihiel operation by insisting that the American army launch an early attack northward between the Aire and the Meuse.

Many American officers involved in the Saint Mihiel operation hold that it was a profound mistake to halt the movement within the limits set by Marshal Foch. Hunter

Liggett's force, which formed one of the pincers, captured its second-day objectives by noon of the first day. Brigadiers reported no enemy in sight, not a shot being fired. Finally with the aid of glasses one could make out "tiny ant-like men in field grey frantically digging at the unfinished Michel Stellung." Beyond that lay open country! General Dickman, whose troops would have had the brunt of the attack, declares: "The failure to push north from St. Mihiel with our overwhelming numbers will always be regarded as a strategical mistake for which Marshal Foch and his staff are responsible." General Fuchs, the local German commander, made no effort to disguise in his telegrams "the very great and continually threatening danger of a break through."

Critics now generally agree that a breach of the Michel position was possible on a wide front during September 12-14. How far the penetration could have advanced is problematical. The valley of the Wœvre is not particularly suited for campaigning in wet weather, but it might well have been worth the chance. General Gallwitz, the German army commander in that area, holds that such an advance would have been far more effective than the subsequent Meuse-Argonne operation. He declared, "An American advance toward Longuyon would have been a blow we could not have borne." The situation seemed to call for a typical American "damn the directives, full speed ahead!"; but Pershing had been one of the early supporters of a unified command, and felt he could not let Foch down on his promise to launch the Argonne attack according to schedule. After all, there is something to be said on the side of keeping agreements. General Charteris was good enough to observe in 1918: "The Americans are men of their word. If they say they will do a thing they do it, or as near it as is humanly possible. It is not always so with the French."

It was the strategic hope of Foch and Haig that a rapid advance of French and American armies toward the Sedan-Mézières railway together with a concentric British attack in the north would have far-reaching, perhaps decisive results. Foch seemed to think the American army could reach the vital railway in two or three swift thrusts; but Pétain, who always had two feet on the ground, said we would do well to capture even Montfaucon before winter. It was found impossible to utilize the "blooded" leading divisions in the first attack in the Argonne; consequently many divisions were distinctly green at the jump off. For example, the 79th Division, which was assigned the most distant objectives, had men in the ranks who had received but a few days training in the States and none in France.

At 5:30 A.M. on September 26, 1918, nine American divisions (the equivalent of eighteen French or British divisions) swept forward.

"It was a crushing weight to hurl on a line held by only five shrunken enemy divisions, averaging barely a quarter of the rifle strength of an American division (six more American divisions were in corps and army reserve). But crafty tactics helped to dam the flood—. The Germans

repeated the method of elastic defense—with real resistance some miles in the rear. The unexpectant Americans ran into this cunningly woven belt of fire when their momentum was lost—. Although the advance of the center had come to an early stop on the slopes of Montfaucon, the wings had pressed on, only to be halted when they reached corps objectives. It was difficult to revive this momentum after six hours delay, and in the face of the enemy's well-posted machine guns little further progress was achieved."

So wrote an English historian. A distinguished American observer declared that "although the mishandling of a certain division would have been burlesque if it had not been so murderous—it was an amazing performance—one of the greatest of the war."

Marshal Foch did not conceal the fact, however, that American progress in the Argonne was distinctly short of his anticipations. On September 27 he sent an irritating note to Pershing saying: "The use of numerous machine guns can undoubtedly retard or cover the enemy's retreat. But they do not suffice to create a solid defensive system." It must have been very hard for Pershing, with all his talk of the offensive, to receive such a missive from a French general whose attitude he had once erroneously described as "tending toward the defensive." By September 29 the German command had thrown six reserve divisions into the Argonne battle, and subsequent American progress was slow and costly. The American commander was now forced to fight a battle of attrition; his army was to have its turn at "tearing its guts out on the German wire and machine-guns." Finally on October 14 Pershing had to call a halt in order to reorganize—a sure sign that the original plan had bogged down.

The initial phase of the Argonne battle gave our national army its first full taste of war. A merciless commander grimly drove his awkward divisions into the shambles—and held them there. When failures occurred Pershing applied the whip to divisional commanders or sacked them. "They in turn put it on the haggard brigadiers. Colonels rounded on the majors and captains and so on down the line. Staff brains reeled from fatigue as they issued more and more directives. Only the wearer of a wound tag might return from the front past the cordon of military police." All the men in a division who could make their legs move, "even those whose coughs might indicate the first stages of pneumonia, were sent along the muddy trails toward the roar of battle under the leaden skies." Warm food did not get to the front; soggy blankets were worse than useless in the cold rain and mist. The army shivered, cursed, and fought on. It was no longer the gay enthusiastic force that had shouted cock-eyed, ribald songs as it marched through French villages.

Under the discouraging conditions prevailing, it was largely the brutal driving force of Pershing that made it possible for the battle to be resumed on November 1 with immediate and far-reaching success. The American commander's methods were ruthless; divisional commanders were knocked about like ten-pins, but in the end the

newly created First Army under Hunter Liggett jumped off on November 1 like a ship freed from an obstructing shoal. It was true that by this time Ludendorff had thrown a fit on the floor of the Hotel Britannique at Spa and the German coalition was crashing around the ears of Hindenburg. The impending capture of the Sedan-Mézières trunk lines, together with the splendid rush of the British and French armies in the north, combined to force the German high command to ask for an armistice.

Although one British critic went so far as to admit that "the American army was the first to reach the German spinal cord," others are unsparing in their criticisms of confusion on the lines of communication and the "amateur staff work." By comparison one British writer urges:

"Our methods produced results which dwarf those of the A.E.F. From August 8 to November 11, our operations took on increasingly the character of open warfare. In that period we drove the Germans back some 80 miles, captured 200,000 prisoners and 2080 guns. The American experience of open warfare was limited to 10 days in November, 1918; the depth of their final advance was 35 miles—their captures amounted to 26,000 prisoners and 874 guns. Yet General Pershing thinks that we and the French failed to set that example of aggressiveness which he was trying to inculcate."

More than one writer has observed that it was fortunate for both Pershing and the A.E.F. that they had to deal with the Germans of 1918 and not the intrepid men of 1914-1917. Yet General Plumer, one of the most distinguished British commanders, has repeatedly insisted that the German army retained its high degree of military effectiveness right up to the armistice. The German leaders may have lost their nerve, but there were still plenty of machine gunners who maintained the final glory of the German arms. The army that left its positions in France and marched back to the Fatherland in good order was a beaten army, but it was not broken.

General Peyton C. March's *The Nation at War* makes many an acid statement showing that Pershing was not distinguished for his team-work. His rapid changes of

mind on types of gantry cranes, motor trucks, and airplane engines nearly drove the War Department frantic. It is true that his cables showed little or no appreciation for the difficulties raised by his uncompromising requests. On the other hand, it is something of a relief to encounter a soldier with enough flexibility of mind to change it frequently. Most commanders were unshakable apostles of the *status quo*.

There seems to be some basis for the criticism that Pershing was somewhat out of touch with the troops themselves. When the troops found that his idea of peace meant only divisional reviews, intense parade-ground work, and the continuation of West Point discipline, they reacted in typical American fashion. As the army of occupation lined up at Coblenz, Pershing tried to warm up a bit. He had made a tremendous newspaper *coup* at his landing in Liverpool back in 1917 by singling out a private in the Royal Welsh Fusiliers whose sleeve was covered with wound stripes and asking the soldier where he got them. In a like fashion at Coblenz he picked out a private in the front rank whose sleeve was covered with wound stripes and asked: "Where did you get these, my man?" To the consternation of everyone within hearing, the hard-boiled private replied in his best Sunday school manner: "From the supply department, sir." If this story is not true, it ought to be!

In that sternest of all tests, the virtual inactivity of peace time after exercising almost limitless authority in war, Pershing has steadily enhanced his reputation. There has been no break in the iron cast; dignity and decorum have marked his firm step. Others might allow their names to be dragged before a presidential convention; but not so with J. J. P.

It may be too early to assign General Pershing a final place in the company of great soldiers. But to use the words of an English critic not distinguished for his praise of Pershing: "It is sufficient to say that there was perhaps no other man who would or could have built the structure of the American army on the scale he planned. And without that army the war could hardly have been saved and could not have been won."

IF THE CONDUCT OF WAR could be reduced to a single volume of generalities this would have been done long ago, and we should now have a few rules that would give the complete precepts for success. Tabulations of "principles of war" have been made, but when they are applied to cases it is found that the most brilliant victories have been won by a flagrant violation of one or more of these "immutable" principles.—GATCH.

THE EDITOR'S SADDLE

Membership and Subscription Status

A FURTHER steady flow of Association enrollments during the past two months has brought the net increase in memberships and subscriptions since last May to forty-five per cent. This has been distributed among the three components of our Army although the Reserve officers have made the largest gain.

The 122d Cavalry, Connecticut National Guard, promises to be the tenth National Guard regiment to enter our one hundred per cent column. Lieutenant Colonel Philip S. Wainwright, of West Hartford, commanding officer of this regiment, has forwarded membership applications from more than three-fourths of the officers of the 122d, and is still engaged in the drive.

Limited Edition of Bernard Pamphlet

ORDERS received for the pamphlet, "One Hundred and Three Fights and Scrimmages," give assurance that the printing, under one cover, of the story of Brigadier General Reuben F. Bernard's gallant career will be undertaken immediately after the publication of the last installment of the biography in this number of the CAVALRY JOURNAL.

Those who have read the story as it appeared in the CAVALRY JOURNAL know that it has proved most thrilling and interesting. For many of our readers, the CAVALRY JOURNAL file will be sufficient reference for this account of General Bernard's scraps. Others wish to obtain extra copies of the story for the use of themselves or friends, and the pamphlet is being printed in answer to a demand from these lovers of Indian fighting tales. The price of sixty cents per copy was fixed to cover the cost of printing, binding, wrapping, and postage only. No profit is contemplated. The reprint will include the text, maps, photographs, and sketches as they appeared in the CAVALRY JOURNAL.

The quantity printed will be limited to the orders received by April 22d. Since no additional copies will be published, those desiring the pamphlet should mail orders to the CAVALRY JOURNAL without delay.

About Tilghman's Sword: He of the Famous Gallop

CAPTAIN ARTHUR L. SHREVE, Field Artillery, on duty with the R.O.T.C. Unit at the University of Oklahoma, Norman, Oklahoma, has sent the CAVALRY JOURNAL the following information concerning the sword of Tench Tilghman presented by Congress for his famous gallop from Yorktown to Philadelphia when he delivered a message from George Washington about the surrender of Cornwallis:^{*}

"I read with great interest the account of 'A Famous Gallop from Yorktown to Philadelphia,' by H. O. Bishop, appearing in the January-February issue of the CAVALRY JOURNAL.

"As the Colonel was one of my ancestors, I am glad to say that the sword is not lost, but in the possession of my cousin, Mr. Harrison Tilghman, of Easton, Md."

Just Mules

ID you ever hear of a mule displaying the "remarkable intelligence" of saving its own life by "seizing a strong willow bush with its teeth and holding on until it could be pulled out" of the water? If not, please turn to page 89.

A most fascinating view of long-eared heads protruding from the water may be found in the photograph, on page 164, of the 26th Cavalry pack train animals engaged in crossing a stream.

Author of Bernard Story

DON RUSSELL, author of "One Hundred and Three Fights and Scrimmages: The Story of General Reuben F. Bernard," was born February 1, 1899, in Huntington, Indiana, a state at that time almost entirely populated by authors. At the age of three he was threatened with removal to Blackfoot, Idaho, when he witnessed a march of soldiers returned from the Philippines. Indians and the Army have interested him ever since and he states that he has read 2,921 books on these and other subjects of which 1,273 are in his personal library.

Willingly interrupting studies at Northwestern University, he enlisted in the Regular Army May 27, 1917, and served as sergeant in Company K, 45th Infantry, and, subsequently, in machine gun battalions of the 9th Division, until February 20, 1919. He is now a 1st Lieutenant, Infantry Reserve, assigned to the 342d Infantry.

He was graduated from the University of Michigan in 1921 with the degree of Bachelor of Arts, having devoted much of his time there to the study of American history. Since then he has been employed in various editorial capacities on several newspapers, including the *Atlanta Georgian* and the *Chicago Daily News*. He now resides with his family at Elmhurst, Illinois, a suburb of Chicago.



Don Russell

*See the CAVALRY JOURNAL, January-February, 1936, pages 47-48.

Sailing the Three C's

BY COLONEL J. C. JOHNSON, C.A.C., and CAPTAIN
GEORGE F. McMANUS, *Coast Artillery Corps Reserve*

REPOSING special trust and confidence in your patriotism, valor, fidelity and abilities, it pleased the President to appoint you a Reserve officer in the Army of the United States. If you are a real asset to your country, you are one of the active assignables. Each year you have pursued your Army Extension Sub-courses, attended troop schools, participated in unit terrain exercises (on your own time) and, when funds have been available, you have gone to camp—all for the one major purpose of qualifying yourself properly to function in grade on and after M day. This being your objective you take your job seriously. You know that under our military policy the government and the people depend upon you.

You, together with thousands of Reserve officers like you, are giving, unstintingly, your time and your best efforts in order that you may be able better to assist in the protection of the United States of America from invasion without or from subversive elements within. You belong to that component of the Army which must furnish over 75% of the commissioned personnel on, or soon after, M day. On shoulders such as yours the fate of our nation rests heavily.

Perhaps you are preparing yourself for an M day in the nebulous and distant future. For over 7,000 Reserve officers M day is *here*. For nearly three years M day and M+ have existed for those who have been ordered to active duty with the CCC. For such officers the time arrived—and arrived suddenly—for them to put into practice not only the lessons they had learned during their military careers but also that common-sense generally inherent in sturdy Americans. For theory they found it necessary to substitute reality—actually to handle men and to be responsible to their country and to their communities for their health, esprit, loyalty, comfort and welfare. Clearly such responsibility includes keeping the minds of these young enrollees, many of whom have been idle, shiftless youths, free from subversive ideas.

As an eligible for CCC duty you are looking forward to the day when priority will carry you to the top of the list on file at corps area headquarters and into that ever-to-be-remembered dawn of your first day in the CCC. When that time comes, where can you reasonably expect to land? What can you reasonably expect to find there?

First, you can count on going neither to CCC G.H.Q. in Washington nor to corps area headquarters. You will in all probability land at some CCC district headquarters where you will find your future district commander and his staff consisting of an executive, adjutant, quartermaster, chaplain, inspector, and various assistants depending on the size of the district, more absorbed in the multitudinous details of administering and supplying the

For over seven thousand Reserve Officers, M day is here.

many camps of their district than they are in you. However, you will find that they will stop long enough to give you your assignment to duty and, if conditions permit, to see that you are given some preliminary instruction in your job-to-be.

In due time you will probably report at some distant camp for duty. What will you find there? You may reasonably expect to find a camp fifty to one hundred miles or so out in the lonesome pines, at the end of an unimproved tortuous mountain road or trail. There you will also find a CCC unit composed of some 200 to 220 husky young Americans hardened to the rigors of forestry work, with appetites which completely offset the calculations of a young mess officer, and with many other needs which often require long over-time hours to meet. Generally speaking, these youngsters will manifest a loyalty and good will which will do your heart good and will be some measure of compensation for the many trials and tribulations. In meeting their natural needs, you will find many things, demanding your constant attention and your prompt decisions, which were not taught in your extension school courses—things which you can learn only in the hard school of experience. You are now in that school, and you will soon find, just as on any M day, that you will have to prove your mettle and your ability.

To what duties can you reasonably expect to be assigned? First a few generalities. You are now to be one of the guiding spirits of a body of young hopefuls, the total of which in the entire corps amounts to six figures—some three or four times the size of the Regular Army. You are not engaged in war nor are you called upon to give military instruction. You will find yourself one of two or three Reserve officers who are immediately charged with the housing, feeding, supply, clothing, sanitation, medical care, morale, welfare, recreation, administration and discipline of the "command." This command, though all-absorbing so far as you are concerned, is represented by only one of the thousands of specks on the map showing the location of all units of this vast Civilian Conservation Corps, the constant turnover in which has by now brought the total number of enrollees to over one million youths. Each one of this vast number has received the personal attention of those who, like you, are immediately in charge of them.

The responsibility for the welfare of those in your camp is henceforth yours to share. In assuming this responsibility, prepare yourself for just about everything that could develop during an initial war-time mobilization—except military drill and military instruction.

You will be required to function from reveille to taps. Even taps does not mean that the day's work is done. It is finished only when the business at hand for that day has been completed. Take your job seriously.

Now for more details as to your general duties, the exact nature of which will depend upon your grade as compared with the other officers in camp. Suppose we switch you from grade to grade and see what happens to your chances and your fortunes.

You are the senior in camp. You are therefore camp commander. As such, you are primarily responsible for everything in your small domain. Although you may delegate such things as paper work, mess management, supply, camp exchange, welfare, camp police, and motor transportation to your juniors, you *cannot* delegate to them *your own responsibility* to higher authorities for the success and efficiency of any of these activities. Nor can you delegate to them the duties of camp administration, agent finance officer or acting quartermaster with which higher authority squarely saddles you. In addition to these you may find it advantageous to handle personally all company administration, and possibly supply and welfare. Circumstances beyond your control, including changes in and losses of your assistants, will generally regulate the extent of your own activities—except *supervision*. Do not forget *supervision*, regardless of all other duties. When the district commander, the district inspector, or other critical higher-up arrives to give you and your works the once-over, if conditions in camp ranging from the material to the intangible are not what they should be, *you* are the one holding the bag—and do not let anyone tell you differently. If your *supervision* has been loose, your job, if not your commission, may be looser still. This is putting it bluntly; but reality is usually blunt.

With the large stapled volume of regulations, orders and instructions with which you will be presented upon assuming your duties, together with additional ones appearing upon the scene mail after mail, and with the multiplicity of reports called for, you will probably want to handle all administrative work yourself. The morning report, sick report and duty roster, while all-important, are simple as compared with the large number of reports and papers such as payrolls, financial statements, tri-monthly strength reports, monthly returns, ration returns, reports of obligations, intelligence summaries, weekly diaries, and so on. The former are child's play—the latter, *man's work!* And they *must be correct!*

One of your outstanding administrative duties as camp commander is the morning camp inspection. Whether under canvas or in barracks this important function must not be neglected under the penalty of a let-down in morale. A four-platoon organization is ideal for the development of a high competitive spirit. The *leader* will, without fail, develop it. In doing so, such privilege as a special trip to town (remember you are far out in the bosque) for the best platoon or the occupants of the best barracks will act like a stimulating "shot" in the arm.

And like the "shot," the effects will soon die out if these inspections are omitted or are allowed to drift into a mere routine. Floors swept spick and span, beds made up "according to Hoyle," shoes in line, stoves polished, cobwebs broomed, outside areas policed—in fact, everything from mess hall to latrine just so, make not only for special privileges, morale and esprit, but also for the health of the command and a camp area which is in reality a home for all. With a large number of new enrollees arriving, this is not at first easily accomplished; but with morning inspections properly made, discrepancies brought daily to their attention, and, when necessary, privileges withheld while others are enjoying them, standards are soon met through painstaking progressive daily accomplishment. When brought about by proper leadership, even new enrollees eat it up, and like it.

At times the maintenance of discipline and even morale in camp will require disciplinary action against offenders. When this necessity arises, be prompt and impartial in meting out the penalty warranted by the offense. In doing so, consult carefully the limits of punishment furnished you by higher authority.

Another important duty connected with your camp administration: letters constantly arrive from the folks back home who want information ranging all the way from why William has not written, to why Nathan's check has not been received (Nathan being in the hospital due to his own misconduct). To put the writer at ease, a personal reply is called for, extending sympathy where necessary, explanation when occasion demands, and interest in the boy always with an ever-ready spirit of helpfulness to the family. Contentment both at home and in camp is *your responsibility*. Take the cue and attend to it personally.

Now *funds*. You may be lax with your own, but with camp funds—*don't!* With a big capital D. Any hour must find your accounts in order. All supporting vouchers must be correct and complete. Anyone at first lax in keeping up his company fund account will soon learn to his sorrow the importance of not confusing the use of "mess funds" with that of "other funds," of keeping all deposits listed in the bank book, of having the bank book balanced regularly, and of always and everlastingly maintaining an exact balance between the net of your company fund as shown by the company council book on one hand, and the total of such funds in bank and cash on hand on the other. This is just day-to-day administration for every company commander.

Supply is most important. The men must be properly clothed in all seasons, and properly equipped for the work at hand. For example, should a fire call or other emergency occur at any time, and should your company not be ready when the call comes in—well, it's just too bad, but there is no excuse!

As you are not functioning in a theater of operations in an emergency, every item of government issue that is not expendable must be accounted for. It is an easy matter to sign a consolidated memorandum receipt for approxi-

mately \$18,000 worth of government property upon assuming command of a CCC camp; but unless it has been physically inventoried, piece by piece, and if stock record cards have not been maintained daily, it is a horse of another color to get clearance upon your transfer or relief.

In other words, it rests squarely on your shoulders, be you captain or lieutenant, to make an absolute check of all property upon taking over, and not to sign for anything that is not physically present. Individual debit memoranda will arrive from time to time, and credit memoranda will be due you from the quartermaster for property for which you should receive credit. Do not sign and return the former until all the property thereon has been personally checked. And do not rest on your oars until you have received all of the latter due you. Nobody will try to cheat you but clerks make mistakes, and remember you are the only one *personally* interested. Again, a clerk may make a mistake and send you a second copy of a debit memorandum. Never sign a debit memorandum until you have checked and double checked to make sure that you are not signing twice for the same property.

Company property. The original issue to enrollees is made according to the basic table of allowances; thereafter in accordance with the table of quarterly allowances, or as worn out by fair wear and tear, the old articles being surveyed, dropped, and replaced by new ones. You are required to make a monthly physical check of all articles of clothing and property issued to enrollees, first, to see that they are taking proper care of them and, second, to see that articles needing renovation or replacement are so acted upon. Give special attention to shoes which must be frequently repaired, to comforters and blankets which must be renovated quarterly and to sheets and pillow slips which have the knack of not returning from the laundry. For this check you may make an inspection of your entire company once a month or, as some prefer, you may inspect one of your four platoons each week. Articles of clothing issued to enrollees are expendable and are dropped from accountability upon issue, but do not forget to give the district quartermaster a seven-day service from date of receipt of such articles by getting to him within that time a list in duplicate of everything issued to each enrollee, by name, accompanied by a signed shipping ticket covering the issue.

Welfare. Remember again that the location of your camp is far out on the shoe-string end of a mountainous trail, unpaved and one-way, requiring two to four hours' travel by trucks loaded with enrollees; and you will soon conclude that welfare in camp may well become a problem of major importance. Trips to town cannot be made every day, but must be confined to week-ends. For five days each week no leaves can be granted. Therefore this small community must be so organized through such activities as athletics, camp nights of various descriptions and traveling motion picture shows, that morale will be maintained at a high level day after day and week after week. Traveling picture shows, with admissions at ten

cents per, have proved most popular. Camp exchange "chits" issued on credit may be used for payment and redeemed by the exchange on pay day. The camp welfare officer cannot pay too much attention to any feature that builds up the morale of the enrollees. He will soon learn to ferret out local talent, at first latent but always on hand, and easily developed.

Orders from higher authority appointing you Class A finance officer and acting quartermaster will vie with you in reaching camp. You will probably win the race by a truck's length, but the orders are sure to follow. This means that you are to see personally that the monthly payrolls are made up in quadruplicate and submitted to district headquarters for payment. It also means that you either draw the money in person at district headquarters and promptly pay all your men including those at your sub-camps, generally two in number; or that you take the payroll check received from the finance officer to the nearest bank, cash it, safeguard the funds on the return trip to camp, and pay off as before; and to keep your credit good, to say the least, promptly return any balance due enrollees not present, to the finance officer. This sounds simple, but funds in your possession on lonesome trails and in isolated camps are a responsibility you will want to dispense with at your very earliest convenience. As agent for the finance officer, you are not yet through. Each enrollee discharged and sent home individually must be paid commutation of rations before leaving camp. These payments have their own finance form to be filled in and to be submitted to the finance officer for repayment.

As acting quartermaster and camp commander you have charge of all camp construction in your bailiwick. There are few camp commanders who have not built at least one CCC camp. The average allowance is \$17,500 per camp, which must not be exceeded without prior approval of higher authority. It is up to you to go out and hire your own workmen, to supervise the construction, to be your own time-keeper, to house and feed your workmen, and to pay them off when finished.

In the meantime, as individual enrollees are discharged, you, in your capacity of acting quartermaster, issue them their transportation requests and see that they understand signing them and turning them in at the proper office for their tickets. Now these transportation requests, issued to you bookfuls at a time, are like termites—they thrive best if kept under cover and soon disappear if left in the open. It therefore behooves you to keep them everlasting under lock and key. If you do so both your individual reports of issues and your consolidated monthly reports to The Quartermaster General are liable to be much more satisfactory to *you* personally and will require less clerical assistance in writing explanations to higher authorities.

Perhaps one of the adjustments you will find most difficult is that involved in your relations with members of the technical services such as the National Forest Service, the National Park Service, and the Soil Conservation

Service. The primary purpose of the CCC is that an enrollee shall perform forty hours' useful labor weekly under the supervision of the personnel of these services. Although the enrollees pass completely from your control during this time, you are, nevertheless, charged with the responsibility of administering discipline for any misdemeanors, lack of interest in work assigned, quality of labor performed, or failure to obey instructions issued by the personnel of those technical services. Here you find the necessity for a nice balance of judgment and fairness. On the one hand the authority of the technical service personnel must be upheld to the end that their work projects may go forward satisfactorily and with minimum friction, while on the other hand, the welfare, safety and general interests of the enrollee must be guarded and maintained. This problem has wrecked the CCC career of more than one otherwise efficient Reserve officer.

Study your uniform regulations. Many Reserve officers are sadly lacking in their idea of what comprises the uniform and how it should be worn. As there is nothing mysterious about this, it is difficult to ascribe existing ignorance in the matter to other than sheer lack of interest. When a service hat is worn, find out and wear what goes with it. If you haven't the necessary complement of other articles, *don't wear the hat!* Be careful of the service ribbons and decorations you wear. Remember you are now on active duty in the Army and certain ribbons, bars and whatnot that you wore while on an inactive status may not be authorized as part of the uniform. Read the regulations and escape embarrassment. In all matters of dress adopt this motto: Be as neat, as clean, and as properly dressed as the occasion permits. This will take you in perfect safety from forest fires to visits at the office of the district commander, and will reflect credit on you personally and on the Army generally.

Now let me demote you to a junior officer in camp.

Yes, you have guessed the first job on my list—mess officer. Not that the camp commander is going to pass this job on to you and then promptly forget about it. Far from it. First, he is going to insist on checking up and approving your weekly menus which you will be required to make out ten days in advance. Then there are the monthly "exceptional purchases" which he alone can pay for from the mess fund after he has settled with the district quartermaster for the monthly contract articles of purchase. He will keep an eagle eye on your Form 86 which shows the financial standing of your mess from day to day; he will also watch your garbage cans which should contain little else than bare bones, prune seeds and thin potato peelings. A glance at these two things during his morning inspections will tell him exactly how the mess stands and whether or not you are on to your job. But, subject to this supervision which never lets up, the actual operation of the mess, from the planning and buying to the cleanliness of the personnel, the mess hall

and its premises, rests squarely on your shoulders as mess officer.

Your money allowance for running the mess is the value of the ration times the strength of the company plus the amount received from boarders. This amount has proved sufficient to feed a well-balanced ration of three fine meals a day with extras such as pastry and ice cream regularly. A good mess is imperative, for the enrollees work hard and get to eat only what is placed on the table for them. This is where your real value as a good mess officer will show up—in placing always a good meal on the table. In this you are, in fact, an assistant welfare officer. Thoroughly digest your sub-course in mess management. It is a fine base to build on, but as I said earlier, you are now a student in the uncompromising school of experience; by actually running the mess you will learn things that no sub-course can cover.

Then, there is the mess sergeant. He will be a great help to you—in fact he will teach you much. But at the same time don't fail to supervise him.

Before you have a chance to become "set" in your mess duties, you will also probably be detailed as camp exchange officer. Remember your camp is far away from any town or village and therefore the camp exchange is a vital installation. There the enrollees should be able to obtain such commodities as soap, tooth paste and brushes, other toilet articles, cigarettes, chocolates and soft drinks. In fact you will find all the responsibilities of a young retail merchant suddenly thrust upon you. In this work you will soon learn to sell your wares at the most reasonable prices possible, and at the same time make your exchange pay good dividends. Bookkeeping systems vary, but regardless of style, on the last day of the month your accounts must balance and pass the audit by the company council. AR 210-65 governs. Various forms and statements must be made out accordingly. *Correct bookkeeping and accurate accounting of funds are among the most important details of CCC duty.*

The camp commander establishes the policies to be carried out in the exchange. He will also keep a close eye on its activities. But it is up to you to do the buying, to maintain the stock at the prescribed level, to keep the books, to check the steward, to take in the cash daily, to bank the funds, and to pay all bills. Exchange dividends should average from \$100 to \$150 a month. When a dividend is declared, the funds are turned over to the camp commander who places them to the credit of either the mess fund or other funds, or both, at his discretion.

As a junior officer in camp you may also be detailed as motor transportation officer. Here you will have more bookkeeping. The results of your daily inspection of the trucks must be recorded. A complete record must be kept of all gas and oil received from the district quartermaster and of emergency purchases made on the road, as well as all consumed by each truck, separately, and that used by the five-kilowatt camp motor generating set. And still more bookkeeping—don't forget to deduct gas purchased on the road from your quarterly allowance.

don't forget to make out trip tickets for the chauffeurs before they start on their trips, and don't forget to keep your motor transportation books up to date.

On your first M day with the CCC you cannot be expected to know all the tricks of the trade, but you will find your seniors generally sympathetic and helpful. If you are honest, sincere, and loyal and keep in mind at all times the thought that you are out to make good, you can go forward and far without fear of your future as a Reserve officer.

In assuming your duties and your responsibilities in a

CCC camp you have one thing in your favor—*time*. Do not expect to perform all your diversified duties in a few hours; but with twenty-four hours a day and seven days a week available, and with the proper planning, organizing and execution of your work it can all be accomplished. CCC work is a serious business, and an officer taking up this duty with the idea of drawing his pay and loafing while doing so, or of doing his work in a routine manner, is headed for a rude awakening and the possible loss of his commission. For him, M day is *here*; and he is expected to *function in grade!*

The Great Delusion

By MAJOR JOHN H. BURNS
Infantry

"Better be ignorant of a matter than half know it."

—PUBLIUS SYRUS (42 B. C.)

ALL army schools of all the great powers spend considerable time in studying military history; not the history of man and his changing environment—which broadens anyone's vision—but the narrow, restricted history of armies locked in battle with the physical details emphasized and the psychological factors barely sketched in. The peoples from which the armies grow and draw sustenance are given scant attention. In this investigation of an artificially restricted subject, officers spend many hours developing the necessary historical technique, and many more hours investigating some small phase of military operations (research) to evolve a learned monograph studded with references. Why should men of action—military men—be forced to follow the trade of the scholar; why this constant poring over records while eyes grow dim, shoulders assume a scholar's stoop, and waist belts lengthen? Why?

"Because," and one can hear the voices of the scholastic soldiers rise almost to the grandeur of a Gregorian chant, "military history is the soldier's test tube. Only from the study of military history can we deduce the immutable principles of war." Then the chorus swings into a minor key. "Tactics may change with changes in weapons, but the principles of war never change." It ends on the high antiphonal note—a triumphant peal—sung by a uniformed scholar with horn-rimmed spectacles—"Study the great captains; only thus can we acquire proficiency in the military art; so sayeth Napoleon."

This unanimity of opinion is impressive. And yet there seems to be something wrong in this constant peering over the shoulder at the dim past while all civilization rushes forward like a mighty river, and men of more practical minds, by intense concentration on the present, are trying to solve the problems of the immediate future. Does this fixation on the past cause the military to forget the future or even the all-pervading present? Before going into this matter let us investigate this great chant of mili-

We can picture the research worker diving deep below the sea of papers and, from time to time, coming to the surface with a fact, like a walrus with a fish in his mouth. Unfortunately the fact is not edible.

tary history to see whether it is as sublimely true as it sounds.

If the study of military history will give us the immutable principles of war, it is excellent. But does it? Great battles have been fought skillfully and won by the violation of these alleged principles. Here at once we discern a crack in the theory—a crack that widens when we find that different nations with the same data before them do not agree as to the statement of the principles. And the crack becomes a gap when we read the brilliant analysis by *Signifer*, in "Reunion on the Styx," in which the author clearly shows that, actually, our so-called principles are but methods—a very different thing. Perhaps *Signifer's* statement of the true principles of war verge on metaphysical formulæ, but what matter? We may disagree with his new conception of them, but we can hardly disagree with his logical, if humorous, exposition that our so-called principles are nothing of the kind.

But what of the opinion of the great Napoleon, which ended the scholar's chant? Clausewitz, that precise formalist, who from the bloody business of war has built almost a philosophy, states that the older a battle, the less valuable is it for study. It lacks details. Therefore Napoleon's dictum to study the Great Captains—Alexander, Hannibal, *et al*—is countered by Clausewitz. It is a pity, too, because the phrase has a sonorous sound.

Where have we come to now? First, we find that we have no principles derived from military history, and then two great minds clash as to how we should study it.

Still, one might think, we should at least be able to obtain from military history a fund of knowledge from which to draw ideas that can be used today. But from the academic hall on the banks of the Missouri comes the stentorian shout: "NO! such a method is pure parallelism; it is destructive to tactical thinking—pernicious, useless." And from the banks of the Upatoi and the plains of Kansas and Oklahoma comes the echo, "No!" Yet von Gronau's brilliant decision to attack on the eve of the Battle of the Marne in order to clear up an obscure situation was based on the memory of what his corps commander did in 1871 in a similar situation. And was it not Napoleon who said that often the happiest inspiration on the eve of battle is only a recollection?

Shall we approve von Gronau's method? Hardly. But officers have made and will make decisions by this method. Here was a correct one. On the other hand, how many incorrect decisions have been reached in the same manner? Can we blame the officers who made them? They had been indoctrinated by the study of military history—stuffed with an uncorrelated mass of contradictions. How could it be otherwise? We begin the study of military history without defining our terms; we do not mass our facts and classify them in order to make generalizations; we deal with *masses of men*, but never with *man*; we think almost exclusively of the physical side of war and neglect the mental side; we deal only with armies in action and not the nation at war; and we bow as humbly as any Tibetan lama facing the throne of the Living Buddha, before the opinion of a successful man of action—Napoleon—or an abstruse philosopher of the obvious—Clausewitz. We proceed as if we were in a static field, whereas we are in the moving, dynamic current of life and culture. It is not a science we are building but a quasi-religion.

"Give us the detailed physical facts of these old-time campaigns," cry the researchers, "and with them we can erect a veritable science of war." So conscientious men dig deep, spending a lifetime in checking dusty battles until a Niagara of petty facts almost drowns us. With little effort we can picture the trusty research worker diving deep below the sea of papers and, from time to time, coming to the surface with a fact, for all the world like a walrus with a fish in his mouth. Unfortunately the fact is not edible.

Carefully, methodically, every detail of a campaign is unearthed and fitted to other details. Often there results a wonderful mosaic of the physical side of battle. Then it is pointed out where the commander has followed, or violated, one of the sacred principles of war—which are not principles—and what he should have done, how he should have done it, where, when, and why. The little rectangles on the map give the picture.

Two things can be noted here: the selection—not scientifically but arbitrarily—of certain ideas called principles, and then a calm rationalization to prove the worth of these ideas. A more faulty practice could scarcely have been devised—not one more likely to lead to distortion

and error. Ironically enough, the facts, unearthed by dint of great labor, give not the whole colorful picture, but only a single-toned, schematic glimpse of the physical outline. In this naïve manner we try to prove a dogma.

With these queer distorted battle stories of a bygone day we feed the military mind until often it becomes as grotesque as the food it feeds upon. Is such a mind competent to meet future wars? There is the gravest doubt whether it is as able to deal with the newness of a fresh war as the mind that never heard of Cannæ or Austerlitz. No war is ever like any other war. The answers to war problems are not to be found in pamphlets or mimeographs. There are no Sibylline Books for the soldier. The less distorted historical data he has to go upon (and note well that all military history data are distorted when the psychological element is excluded), the clearer will the commander see the immediate picture and the better will his decisions be.

Let us look at the record to see whether military history has produced our great soldiers. Washington, the country squire, was certainly not a student of war. Of the leaders of the Civil War, Halleck alone could be called a military bookman and he was inept, because, one feels, he was everlasting trying to fit the unique problems of the Civil War into the Procrustean bed of military history. The result was not happy, for in war we cannot cut our problems to a certain pattern; the problem cuts us more to its own shape. Grant was no military student; he was a simple man who saw a simple problem and solved it in a simple way. Sherman, with probably the keenest mind on the Union side, was never hampered by wondering how Napoleon would have used railroads had he had them. He simply decided how they could best serve Bill Sherman's purpose and used them that way. It is more than mere coincidence that the great leaders on the Union side, although educated as soldiers, came to the war from civil life. Couple this with the fact that the amateur general often did brilliantly—Logan, whom Sherman desired as an army commander, is typical—and we have something to think about. Can it be that their very lack of knowledge of past wars and their freshness of outlook was responsible for their success? And then consider Forrest. He was not only a great leader, but a keen observer and a clear thinker. His endlessly quoted remark on getting there "fustest with the mostest men" is an axiom to rank with Napoleon's.

Who coached Alexander, Hannibal, or Cæsar in military history? Alexander took his father's army, and without any knowledge of the great campaign waged by Thothmes III and Rameses II of Egypt, sliced like a knife across Asia and into India. The Carthaginians had just learned to fight from Xanthippus, the Greek, when Hannibal came to power. Carthage had no fund of military traditions or history; consequently, there was nothing Alexandrine about Hannibal's battles. In their way they are unique. Perhaps here we have the Semitic mind as it works in war. Then there was Cæsar, the middle-aged man stepping into war from the rowdy political arena. Is

it likely that he had devoted his time to poring over old campaigns? More probably those hours were spent in some district political club telling the boys how to vote, how to intimidate the other side, and distributing patronage judiciously. A rare character, was Julius. And even Napoleon, the Number One advocate of the study of military history, was not the profound student of it that his celebrated dictum implied. It is all a bit bewildering.

Can it be that this study in the narrow sphere of military history renders a man unfit for battlefield command? There would be a justification for it if, by the sacrifice of a few potential commanders, we obtained a group of specialists capable of organizing the data of past conflicts, generalizing from these data, ascertaining trends of evolution, and from it all predicting with fair accuracy the shape of things to come—the character of the next war. *But the acquisition of military historical knowledge is worth nothing except when it can be used to predict the future.* That, in fact, is the criterion of all scientific knowledge. If our laboriously garnered facts do not lead to such predictions, then we have only a mass of doctrines, opinions, and dogmas. We have a faith but no science.

Has all this laborious study enabled the orthodox military historian to predict the character of a future war? Decidedly not. The most severe indictment of the military historian lies in the fact that he did not predict the shape the World War would take. Limited though he was to the study of armies in combat, he still had available much data that pointed unmistakably to trench warfare.

The Civil War showed clearly that the defense could dig in quickly and erect hasty breastworks. Under this cover a small force, with the crude musket of the day, could repulse a powerful infantry attack with frightful losses. Grant learned this to his sorrow at Spotsylvania and Cold Harbor, and having learned it, sat down to an eight months' siege of Petersburg rather than risk dashing his army to pieces on its breastworks.

After this war came the magazine rifle, and later the machine gun, both of which increased fire power enormously. Another small item slipped in unobtrusively from agriculture—a familiar thing, ignored and neglected; yet it added tremendously to defensive power and eventually changed all tactics. That item was barbed wire. These three things—trenches, barbed wire and fire power—were squarely before the eyes of the military historian waiting to be evaluated in a prediction of the character of the next war. This prediction might have been used as a basis for organizing the war force, deciding its equipment, and evolving its tactics. But the military historian was either strangely blind or so intrigued with the geometric battle designs of Jomini that he saw little else.

It may be said that the World War was a particular case; that actually it was a siege; that great masses in the restricted area of northern France caused the peculiar aspect of the war. But the historian knew already that great masses would be used there. Moreover, he had the example of Port Arthur to indicate the type of modern

defense; yet he failed to put these facts together and predict a war of positions. He was more concerned studying books that told the tale of Port Arthur than in appraising the significant factors directly before his eyes—trenches, barbed wire and machine guns.

Perhaps we have no right to say that it was solely the restricted area and the great bodies of troops in it that caused the character of the World War. A study of Sherman's advance to, and capture of, Atlanta shows the invader, with the butt-end of a continent in which to maneuver, using entrenchments. Give one of Sherman's corps but a few hours' halt, and it could, and would, build an almost impregnable position. Fifty years before the World War, both attacker and defender were using entrenchments extensively and skillfully. Something was driving the soldier into the ground. That something should have been evaluated. It was the most significant military fact of the entire war—of the century—yet it was practically ignored. Thus, even within his own sharply limited field, the military historian was strangely blind to the significance of facts.

A full half-century the military historian had in which to study this war. And what do we find in 1914? The French with their emotional doctrine of the *offensive à l'outrance*, and the Germans with colossal schemes of open maneuver leading to another Sedan, smashing together in one big, open battle at the Marne. Then to the bewilderment of all, the soldier went into the ground, and there came four years of warfare such as no one anticipated or understood—trenches, barbed wire and machine guns.

Stalemate! So the high command called for more guns to blast a way through, only to find that once through one line they still faced another—with trenches, barbed wire and machine guns. (Sherman, fifty years before, envisaged this organization in depth; hence his shifting maneuvers in the Atlanta campaign.) Then in desperation gas was used—anything to get the war into the open and on a footing where the high command could recognize it and fight it in accordance with the old historic pattern. Meanwhile Europe bled herself white, and nations consumed the wealth of generations.

Military history has failed in its sole function. All the information on the subject of past wars has not even enabled us to predict the problems of future wars, let alone suggest solutions for them. In the name of the great god Mars, why our reverence for it?

You may say that we are asking too much of the military historian. But are we? The tactical pattern of the World War was clearly discerned by one man, and he not a soldier. In 1897, Monsieur Bloch, a Pole whom the soldiers thought mad, saw with clairvoyant eye the stalemate, the trenches, the slaughter, and the stabilization. This man was a banker and a pacifist but had any one of the great powers based the organization of its pre-war force on his conception, that power would be master of Europe today.

If a civilian can do it, why not a soldier? What is our deficiency? Wherein lies our error? Here we come to the

heart of the Great Delusion. The major reason lies in the fact that military historians have confined themselves narrowly to the study of bodies of troops in battle and campaign. They restrict their investigation to the physical details of battle—the geometric pattern of war—and ignore its psychological implications. They fail to see that even if the battle pattern could be reconstructed to the last physical detail, any conclusions drawn from it would be incorrect, because moral factors were not considered.

The crowning error, however, is to ignore the fact that armies are but a part of the people and their life and industry. The whole people should be studied. As it is, we only study the sword a nation uses, or should use—what shape it should be, what material, the type of grip, the kind of pommel; and we may even use a microscope on the metal itself. Then we develop methods of using the sword, called tactics. All very useful, but we have neglected to study the nation that will use this ideal weapon. Meanwhile that nation may have developed for peaceful purposes a certain device which, applied to war, may render the weapon and the methods of using it obsolete. Barbed wire, lethal gas, the track-laying tractor, the gas engine, and airplanes are examples in point. Not only have they been found useful in war but they bid fair to transform it completely. What others are before our eyes unregarded, and how many are still in the womb of Time?

One is tempted here to make the generalization that a nation's war machine can only be the sum of its entire social and industrial life. The social life produces the soldier material; the industrial life, the tools of war. The evolution of war can be traced only in the evolution of civilization. It is not a study of past campaigns that changed the face of war, but swift utilization of the products of peace in the waging of war. In ancient days the invention of the wheel and the clumsy country cart led promptly to the development of the swift war chariot, just as in modern times the farmer's tractor becomes the basis of the armored tank.

As pure theory we can determine how any army would be more efficient if organized and equipped a certain way, but if that way cannot well be followed in view of the social and industrial set-up of the nation, then it will have to be discarded or modified to fit into the civil structure. Perhaps our tactics could be changed for the better if our soldiers came to the army with a different mental equipment. But unless we can change the heredity and environment producing the mental set-up—and we cannot—we must use the man as he comes to us. How the Roman generals of the late empire must have sighed for the solidity of the heavy armed masses of foot that had conquered the world; but this solidity had disappeared along with the Roman virtues that produced it. No wishing or even training could resurrect it. So, perchance, they used masses of heavy cavalry. They did well with the new weapon, but not until the loss of half an empire had driven home the lesson that the ideal, built from historical data, must

inexorably be discarded for the compromise that will fit the realities of the present.

The problem of these old Roman soldiers was simple compared to ours. The weapons of war had not changed greatly from the days of Marius and Sulla. Well might the soldier of the late empire think that he could copy the campaigns of Caesar, who used the same type of organization, and some of whose legions still existed, at least in name. That indeed is what these ancient warriors thought; but their concentration on the physical side of war—weapons, formations and the like—left them blind to the fact that society was giving them a different psychologic product to turn into a soldier than it gave to Caesar a few hundred years before. These generals knew their art and the history of it, but they did not understand the history of the empire nor the great social changes occurring within it that affected their soldier material. The scope of their historical study was too narrow, and, as a result, a mass of Gothic horsemen—which Caesar's Tenth Legion would have torn apart—rode over the imperial army at Adrianople and the Western Empire was lost.

Today, in a machine civilization, the tools of war change rapidly and society changes almost as rapidly. The problem facing the modern soldier is far more complex than the one that confronted the Roman. Never before has it been so complicated by the things stirring in industry and life.

War—and here we risk another generalization—is more a reflection of the life and industry about us than a reflection of past wars; but armies reflect with uncanny accuracy the armies of the past. This paradox has muddled military thought, yet the explanation is simple. Since the human has not changed basically in some tens of thousands of years, it follows that the method of controlling, directing, and rewarding this fearful, panicky creature under fear of death must necessarily be relatively constant. Society may mould the individual for better or for worse, but it cannot change him fundamentally. The cave dweller and the penthouse owner are blood brothers. Scratch a scientist and you find a savage. However, even though the human cannot change himself essentially, he does change his environment—he produces new tools, new weapons, new instruments, and new machines. And warfare is constantly changing as these things are adapted to its use, and as they change the structure of society.

We know how to control humans in battle. Our armies are direct heirs of the legion in this respect. Hold fast to it. But the method of using these humans in war will be determined for us by the pattern of the times. Not what we think, not what Napoleon thought, not what anyone thinks, determines the shape that warfare will assume. This, it may be repeated, is determined inexorably by the age. Tactics, then, is not something that can be formulated from a minute consideration of past battles. The evolution of tactics is to be traced, strange as it may seem, by studying factors outside the sphere of war itself.

March-April 1930
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We must forsake the old mode. We must study man as a whole, not merely as a soldier. We cannot permit our attention to be monopolized by the skillful fencing of commanders whose swords are armies. We must cease to look upon the lunges and ripostes of the contestants as the criteria of success and failure. The physical details of battle are but the background. Not in the chessboard arrangement of units will we discover the answers but in the analysis of what happened in the minds of the contestants—leader and led—and how it happened, when it happened and why it happened. This leads directly to a study of the nation, society, industry—in short, the whole culture of the contestants.

Our concern with the older wars need only be sufficient to illuminate the action of man in battle. The study of recent wars should go beyond this in that it should seek to plot trends of evolution in weapons and tactics. Then against the background of contemporary society, the military student can build the framework of a science.

The Great Delusion is thinking that war can be comprehended, and that the pattern of future wars can be predicted, by a study of the narrow field of military history. The military historian needs to range through anthropology, psychology, sociology, economics, social and industrial history, and philosophy. He must cease con-

centrating on the dramatic battles of the past, which thrill his heart but fuddle his brain with their outmoded tactics. He must forsake his hero worship and his belief in the potency of geometric forms of battle. He must cease rationalizing—twisting facts to prove a preconceived idea. He must abandon his intense application to the physical factors affecting battles and spend more time on the intangible psychological factors, which are decisive. He must see behind the obvious. Lastly, he must organize, classify, and generalize from his facts. Only thus can he shake himself free from the trammels of a pseudo-science and step clear-eyed into the real science of military history where man and all his works is the field of research. And the problem is to combine man, the unchanging, with the implements, machines, tools, and instruments he ceaselessly spawns to his own bewilderment and the complication of his environment, into an army that can solve the problems of the coming war.

It is a large order. We may have to await the arrival of a military Darwin to classify our heterogeneous data, bring order into our chaos, and deduce the general and fundamental principles. At present there are too many spade workers in the field. What we need is a few creative thinkers.

River Crossing by Rafts Made of Habert Sacks*

INTRODUCTORY NOTE.—In practically all recent maneuvers in France (both theoretical and practical), the defensive party has taken up a position behind a stream against mechanized means. This state of mind has caused mechanized troops to consider rapid means of crossing stream lines.

The Habert sacks mentioned are waterproof and are filled with straw to give them buoyancy.

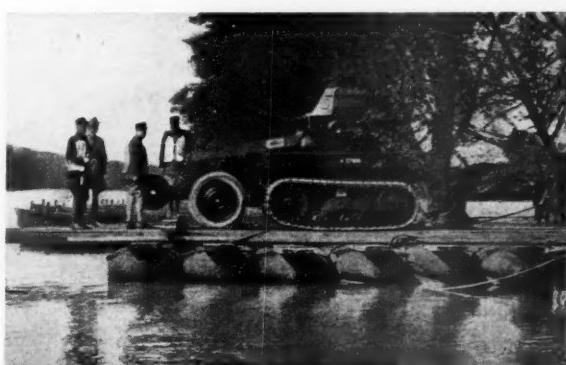
ON May 31, 1935, the 3d Group of Armored Cars crossed the Eure with its reconnaissance and combat armored cars. This crossing was effected by employing an entirely new technique, based on the employment of strictly regulation means in this unit (Habert sacks), together with the aid of material found in the smallest localities (planks, poles, ladders).

The crossing by reconnaissance armored cars required the construction of a raft of twelve sacks, and that by combat armored cars, a raft of twenty-four (two beds of twelve).

By the rapidity of their construction (three or four hours including the filling of the sacks), by their simplicity (material used for building houses; ladders used for telegraph poles), by their capacity for bearing a weight (approximately ten tons for a raft of twenty-four sacks), these rafts will render great service for the cross-

ing of rivers by heavy motorized units, and in general, for armored cars, artillery and combat tanks.

Cavalry divisions, the mission of which is to establish contact with the enemy on a large front, may find themselves confronted by obstacles which they have to cross in the shortest delay. The bridge equipment of these large units will, of course, allow them to build one or two bridges. However, the impossibility of camouflage of these works will not leave the enemy in doubt for long as to the intentions of the command and the direction of



A combat armored car on a raft of twenty-four sacks; the upper bed of sacks being completely out of water.

*Translated from the Revue de Cavalerie, November-December, 1935.

its effort. Their vulnerability will result in their rapid destruction.

The use of rafts of twenty-four sacks solves at the same time the problem of crossing by surprise and that of the application of a maximum of important means at a given point. By multiplying the crossing points, one diminishes considerably their vulnerability.

Moreover the equipment of units with Habert sacks, allowing the possibility of making several rafts, diminishes the time necessary for the crossing of rivers. For instance, a regiment possessing seventy-five sacks will be able to effect the simultaneous crossing of three combat cars, which is equivalent to a platoon.

Of course, certain geographical considerations will have to be taken into account, whether it be the height of the banks of a river, the swiftness of its current, or the depth of its bed.

However and whatever be the conditions existing, experience has shown that the stability of the rafts is such that they can be used under all circumstances providing certain precautions are taken. The swiftness of the current alone might prevent the employment of Habert sacks, although again in this case the choice of a landing point downstream permits a satisfactory solution of the question.

In conclusion, the results obtained by the 3d Group of Armored Cars in regard to river crossing tend to show that it would be advisable to equip each heavy unit in peace time with the material necessary for the construction of a raft of twenty-four sacks.

This material (sacks, planks and poles) would require a truck for its transportation and would allow the crossing of a river in less than four hours. Other Habert sacks, constituting the regulation equipment of the unit and material found on the spot, would increase rapidly the number of crossing points and thus diminish the total duration of the crossing.

Each unit would thus be able to carry out drill in river crossing once or twice during the year by its own means; NCO's and men being already drilled for this maneuver, rafts would be constructed more speedily and river crossing, which still represents a great difficulty for leaders and men, would become as natural and simple as embarkation drill.

TACTICAL SITUATION FOR RIVER CROSSING

I—General Situation.

Two armies (one on the east and another on the west) have come into contact on the line N.E.-S.E., limited by the Epte river, Giverny and Forêt de Bizy.

II—Information concerning the enemy.

Close reconnaissance shows that "Pacy-sur-Eure is held—no resistance on the south but all the bridges on the Eure are blown up."

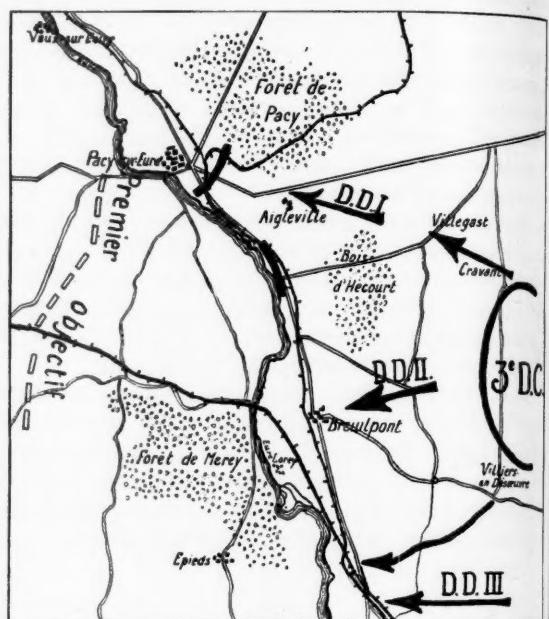
III—Mission of the 3d Cavalry Division.

The Cavalry Division will operate in the direction of Seineuil, Evreux, with the mission of enveloping the

enemy's west flank, which is reported to be in the region: Giverny—Forêt de Bizy.

1st Objective: The line Serez-western border of the Forêt de Merey-Le Plessis Habert-Saint Aquilin.

2nd Objective: To be ordered later.



The tactical situation.

IV—Plan of Maneuver.

The general decides to cross the Eure south of Breuilpont.

Horse-drawn and cross-country vehicles can cross the Eure on Veyry bridges. There remains the question of the armored cars.

EFFECTING THE CROSSING—MAY 31, 1935

The operation began at 8 A.M.; the assembly of the material was completed by 10 A.M.; the construction of the rafts began at 10:30 A.M.

Necessary Material.

Habert sacks: 1 raft of 12 sacks }
1 raft of 24 sacks } 36 sacks

Other necessary materials (planks, poles) were found locally. It is of current use in the construction of buildings. For poles, telegraph poles can be employed.

Troops.

20 men for the raft of 24 }
10 men for the raft of 12 } 30 men

Choice of emplacement.

The emplacement selected should:

(1) Have low banks (50 centimeters) in order to allow tracks to be used.

(2) Have a depth of water at least equal to 0.80 meter in order that a raft of 24 sacks does not come into contact with the river bed.

(3) Have a current not swifter than 1 meter per second.

The time necessary for the construction of these rafts, if one has at his disposal all of the material necessary, is approximately one and one-half to two hours with a crew of men having already done this work at least once.

The construction of the rafts was terminated at 12:30 and the simultaneous crossing of one Reconnaissance armored car and one Combat armored car was effected. Technical conditions for the crossing of rivers.

CONSTRUCTION OF RAFTS OF TWELVE SACKS FOR THE CROSSING OF RECONNAISSANCE ARMORED CARS OF 4.8 TONS

The raft should be made in the same manner as for the raft of eight sacks, but six pairs of sacks should be employed. It would be advisable also to place lengthwise, on each row of sacks, a plank six meters in length instead of one of four meters.

Owing on the one hand to the weight of the vehicles to be embarked on these rafts and also the fact that some of these vehicles have wheels, it is necessary to make tracks which occupy the length of the raft. These tracks will be formed by three planks placed on two lines.

The planks will be nailed together in threes with nails of 200 m/m the extremity of which will be hammered down after traversing the planks.

If there is sufficient material, it will be preferable to assemble the tracks on the banks and to carry them, when ready, to the raft. Alternately, assemble the planks first and carry them to the raft, the lower part on top, then affix the cross bars. Turn the tracks over, taking care not to burst the sacks with the extremities of the cross bars, and put them in place.

As in the case of all tracks, it will be preferable, if the length of the planks allows it, to reduce if possible the number of cross bars.

NECESSARY MATERIAL

Habert sacks	12
Straw	960 kilos
Planks, 8 x 22 x 4 meters long*	42 meters
Planks, 8 x 22 x 6 meters long	6 meters
Planks 1.30 m. long	22 meters
Poles 0.10 m. in diameter by 5 m. long ..	7 meters
Balk lashings	80 meters
Rope 20 m/m diameter	2 meters
Nails 140 m/m	5 kilos
Nails 200 m/m	10 kilos
Carpenters' hammers	5
Pliers	2
Crosscut saws	2

Have also the material necessary for the construction of moorings, if necessary (piles, maces, etc.).

*Planks for making tracks are given as being four meters long as this is a current dimension. However some of these may be of lesser length.

CONSTRUCTION OF A RAFT OF TWENTY-FOUR HABERT SACKS FOR THE CROSSING OF RIVERS BY COMBAT ARMORED CARS OF SEVEN TO EIGHT TONS

Assembly of lower frame.—Place longitudinally the five poles of seven meters and across these the poles of four meters, and assemble them as indicated in the diagram with balks or wire.

Laying the sacks.—Fix at the crossing of poles 1, 2, 4, 5 rack lashings which will serve to maintain the sacks on the frame; also rack lashings folded double affixed to the emplacements marked in red in order to make sure that the raft is lashed securely. Then place the sacks 1 and 2, lashing them at their extremity with a rack stick. Maintain them on the frame by rack lashings, passing over them and fixing them with a knot to the pole. Operate similarly for sacks 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12.

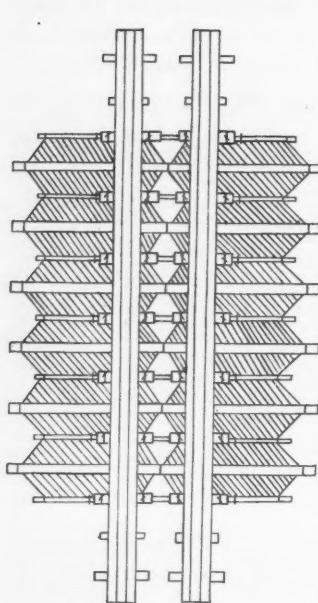


Construction of a raft of twenty-four sacks.

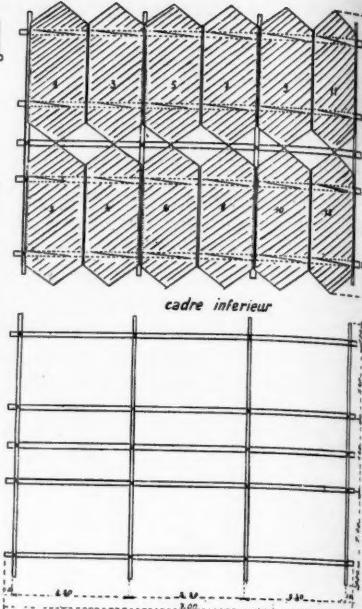
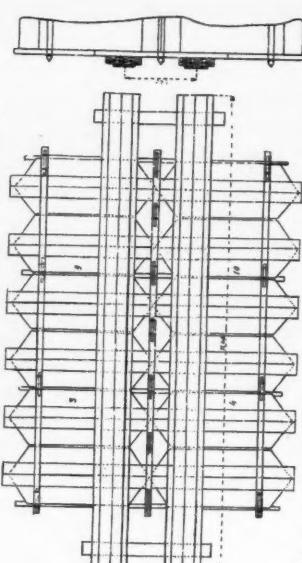
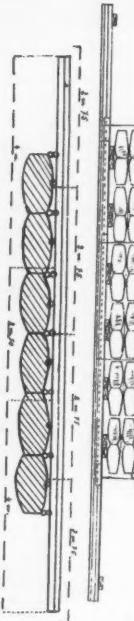
UPPER: Being pushed in the water after having been placed together at the river bank.

CENTER: Determining the exact place for the loading ramp so it will not interfere with caterpillars.

LOWER: Constructing ramp extending from river bank to raft.



Raft of twelve Habert sacks for crossing reconnaissance armored cars of 4.8 tons.



Raft of twenty-four Habert sacks for crossing combat armored cars, seven to eight tons.

2nd Row.—Place the 2nd row of sacks exactly on the first, lashing them at their extremity the same as for the first row. Lash the sacks placed at each end by means of a balk and rings.

Flooring.—Place the planks in the axis of the supports formed by two adjacent sacks, lashing them to the three poles of seven meters corresponding with those of the lower frame 1-3-5. Put the track in place commencing at the center; the planks of 3.40 m. resting on the rows of bags 3-4 and 9-10; then place the planks of 4 m. at each extremity; place on this first row a second, utilizing the planks of 5.70 m. which join in the axis of the raft. Place on these three planks, two planks of 4.22 m., crossing the joints. Bind the two extremities of the tracks with a plank 2.50 m. by 8/22. All these planks are fixed by means of pointed bolts and nails.

Remark.—In order that these rafts may be used for a fairly long time, it will be necessary to make sure:

- (1) That the lower sacks are in good condition.
- (2) That their openings are water-tight, as during the course of loading these sacks may become completely immersed.

Crossings.—The crossings may be made with the aid of a boat hook if the current is less than 0.40 and the depth of the river is less than two meters; or by means of a sheer line, for a current varying between 0.40 and one meter.

Above one meter, these rafts should not be used as they offer great resistance to the current.

NECESSARY MATERIAL

- (1) Lower frame:
5 poles, 7 m. x 0.12-0.15 diameter
4 poles, 5.05 m. x 0.08 diameter
40 balks or 5 kilogs of wire of 1.5 m/m
- (2) Bed of sacks:
12 Habert sacks, 6 rack sticks
16 rack lashings (for fixing the sacks)
15 rack lashings for joining the lower frame to the top frame.
- (3) Bed of sacks and flooring:
12 Habert sacks, 6 rack sticks
3 poles, 7 m. x 0.12-0.15 diameter
24 planks, 5m.70 x 8/22 (12 being used for making the track)
6 planks, 5m.40 x 8/22
12 planks, 4m.40 x 8/22
2 planks, 2m.55 x 8/22
8 planks, 4 m. x 4/22
15 rack lashings
15 rack sticks
4 moorings
150 pointed bolts, 22/150
150 pointed bolts, 24/160
130 nails, 18/80.

It is requested that the party who borrowed from the Office of the Chief of Cavalry two 16-mm films; i.e., "Riders of Riley" and "Modern Centaurs," return same at once.

BOOK REVIEWS

T. E. LAWRENCE OF ARABIA. By Charles Edmonds. With 5 sketches; 199 pp. D. Appleton-Century Company, New York, 1936. \$1.50.

Reviewed by Major Wm. C. Chase, 9th Cavalry.

This is a short yet complete biography of the life and exploits of T. E. Lawrence. It supplements and interprets Lawrence's autobiography, *The Seven Pillars of Wisdom*. It contains five sketches which in some cases are incomplete. Taken all in all, however, it is the most readable book on this phase of the Palestine Campaign that your reviewer has read.

Charles Edmonds is the pen name used by C. E. Carrington, an English publisher and author, who served throughout the World War and who has been an Oxford Don, a traveler, and a historian since the armistice. The author has made a thorough study of his subject.

This biography is well written and is easy to read. There is a minimum of editorial comment and a maximum of fact. The author does his best to dispel the many myths that have grown up around Lawrence and states repeatedly that it was British gold and General Allenby's good sense in backing Lawrence that kept the revolt in the desert alive.

The difficult task in writing about Lawrence seems to be to understand his character. Edmonds sums Lawrence up as follows: "his uncanny power over men, his furious energy, his horror of English society, his dislike of women's company, and his streak of asceticism." Lawrence himself said: "Every young Englishman has the roots of eccentricity in him." Apparently the plant flourished in desert soil.

Lawrence was born August 15, 1888. He was brought up in Oxford and later went to Jesus College, Oxford. Lawrence read about Arabia prodigiously. He made his first visit to Syria in 1909. As a student he was a solitary, aloof, studious young man who read all night and rarely went to class. He also read a great deal of military history, which helped him materially during the war. He read Marshal Saxe, Napoleon, Clausewitz and Foch.

From 1910-1914 Lawrence had a traveling scholarship and roamed through Syria, Palestine, Mesopotamia, Sinai, and Egypt. He learned many dialects of spoken Arabic and became intimately acquainted with the people, the politics and the topography of his future theater of operations; an advantage that should be of great assistance to any commander. Lawrence had an extraordinary control over Arabs, which he developed during this period of his life. He also accustomed himself physically to the hardships of desert life. In 1913 he helped to map the Sinai Peninsula, the very terrain over which the Arab armies operated in 1916.

In September, 1914, Lawrence was gazetted a 2d Lieutenant and placed on duty in the Geographic Section of the British General Staff at the War Office in London. In November, 1914, he was sent to Cairo for intelligence duty in the Arab Bureau, which controlled British policy throughout the Middle East. He worked very successfully at this "pick and shovel" G-2 work for two years.

The Arab revolt against Turkey broke out at Medina in June, 1916, under Emir Feisal, the third son of Hussein of Mecca. Lawrence arrived on the scene in the Hejaz in October, 1916, landing at Jeddah, as a diplomatic agent. His mission was to make the local Arab insurrection into a national Arab revolution. He had to find a leader and at once selected Emir Feisal, an Arab who had been brought up in Constantinople as a Turkish officer. Lawrence made a wise choice. He made a tool of Feisal, using him as a nominal leader of the Arabs, while Lawrence himself supplied the brains, the initiative and the "will to win." The Arabs during the entire period were the cat's paw of British diplomacy in the Near East.

Lawrence's plan for the Arabs was to move up the coast of the Red Sea, supported by the British Navy and Army, and carry the Arab revolt as far north as Damascus. He accomplished his mission, but it took him two years to do it. He did it by skillful leadership, officially as a military adviser and British liaison officer to the Emir Feisal. Lawrence maintained close liaison with General Allenby and worked throughout to support the right flank of the British effort in Palestine.

The Arabs isolated a large Turkish garrison at Medina and then operated all during the period by harassing and raiding the railway that ran to the Hejaz. Lawrence evolved a new technique in desert warfare. 20,000 Turks were isolated either in Medina or in detached posts along the Hejaz Railroad. Lawrence's plan was to contain these Turks. They were to be harassed and worn out by rushing up and down the railway, but the railway was to be left open just enough so that the Turks would not starve. This containing of 20,000 Turkish troops is Lawrence's chief military contribution to the Palestine campaign. He accomplished this by using to the maximum the Arab's good characteristics of mobility, endurance, and range of action.

Some of Lawrence's camel rides across the desert seem remarkable. At one time he rode 150 miles in 50 hours. This followed a month in which he had ridden 50 miles a day—a good example of mobility for any theater of operations.

When Allenby assumed command in 1917, Lawrence had moved his Arabs up to Akaba on the British right flank. Allenby supported Lawrence continuously by

arms, supplies, and money which was used liberally by Lawrence both as subsidies and as pay. By this time the Arab regular army was taking form. Lawrence now shifted his scene of activities farther east and went out into the desert to stir up the unorganized Bedouin tribes against the Turks.

Lawrence used a unique method of handling the Arabs and Bedouins. He never commanded himself, but always acted as adviser to some selected Arab or Bedouin, who of course "gained a great deal of face" from the continued success of the exploits. Lawrence's manner of living in the desert was to "shoot straighter, ride harder, eat and drink less" than his Arab followers.

During the final phase of the 1918 campaign, the Arab mission was to isolate Deraa, the strategic railway junction on the Turkish communications. It was to be attacked three days before the main battle along the coast at Megiddo in order to attract Turkish reserves to the desert flank. The Arabs were to cut the railway on all sides of Deraa so as to intercept the communications of the Turks. The plan was successful. 1,200 Arab regulars and countless Bedouin attacked Deraa as planned. All Turkish wire communications from Army Headquarters were cut. The railway was destroyed.

The Arabs moved north to Damascus on the right flank of the Desert Mounted Corps. Lawrence's operations during this pursuit and destruction of the Turkish forces are described in a report sent in by a British cavalry patrol as follows: "There's an Arab over there in a Rolls-Royce, speaks perfect English, and seems to be in a hell of a rage."

On October 1st the Arabs entered Damascus. Their mission was accomplished. Thus ends Lawrence's career as a guerrilla leader. He left Damascus as a full colonel with many decorations. He attended the Peace Conference in 1919 as a member of the Foreign Office Delegation and as interpreter for Emir Feisal. He was demobilized in July, 1919. He then renounced his rank and decorations and started to write his autobiography, *Seven Pillars of Wisdom*, which turned out to be both a history and a confession.

During this period, 1918-1922, the Lawrence myth, "the Uncrowned King of Arabia" story started. The myth grew rapidly, especially in this country. It has lasted so well that in 1935, the state controlled Italian press claimed that Lawrence was organizing the Abyssinians against them. Later Lawrence was a diplomat in the Middle Eastern Department and was largely instrumental in settling the Near Eastern affairs.

Lawrence resigned from the Colonial Office in 1922 and enlisted in the Royal Air Force, as J. H. Ross. He was soon discharged. He at once reenlisted in the Tank Corps as T. E. Shaw. Later he transferred to the Royal Air Force and was sent on foreign service to India. He worked ceaselessly on his autobiography, *Seven Pillars*, which was published at great expense. He then published *Revolt in the Desert* to defray the heavy expense of publishing *Seven Pillars*. In India he translated the *Odyssey*

and made enough money to retire. He was killed in a motorcycle accident in May, 1935.

Taken as a whole, this is an excellent biography of a most successful leader of guerrillas. It is well worth any soldier's time to read this book.

AMERICAN SOLDIERS ALSO FOUGHT. By General R. L. Bullard and Earl Reeves. Longmans, Green and Co., New York and Toronto, 1936. 118 pp. \$1.00.

Reviewed by Lieutenant Colonel Harold C. Vandever, Field Artillery.

This small book is an appreciation and a summary, in popular form, of the American contribution to victory on the Western Front in 1918.

In a brief preface, the distinguished author tells us that his purpose in preparing the volume was to meet a need which exists because of three facts:

First: because many American accounts either picture only the writer's own experience, or are of a nature so technical as to be "more suitable for the War College than for general reading."

Second: because in most accounts written abroad there is little recognition of the American effort, but rather a general and apparently deliberate tone of fault finding and complaint at what American troops accomplished.

Third: because in too many accounts by Americans of competent experience, this belittling of American accomplishment has not been challenged fairly nor courageously.

To meet the need thus created, General Bullard has prepared an account in popular form, outlining American participation in France, and confronting with fact, figure and comparison the slurings and belittlements which have been so conspicuous in allied "appreciations" since 1918.

The first chapter of General Bullard's book analyzes the familiar accusation that American intervention in France came too late to be of value. Rates of arrival in France of American and British troops are compared, the numbers and strengths of American and British divisions effective at the front in November, 1918, are contrasted, and the physical and moral effect upon the German will to win are deduced.

In his next three chapters ("Defeat," "Turning" and "Power"), General Bullard pictures broadly the stark and immediate prospect of an overwhelming allied defeat in the spring of 1918, the shifting of the balance of power in the summer of that year, and the new allied preponderance of strength which brought victory in the fall. The conclusions, clearly drawn, are that American troops, brought across three thousand miles of ocean, did arrive slowly in France—but arrived there faster and in larger numbers than did British troops brought across a few miles of channel; and that American troops did arrive late, but exactly in time to change inferiority to preponderance and defeat to victory.

Eight succeeding brief chapters describe American participation in battle. This clear and simple account

should be of interest to every American who will value a comprehensive understanding of what his troops accomplished, and where. The chapter titles alone outline the story like a diagram: Cantigny, Château-Thierry and Belleau Wood, The Champagne, Soissons, Sweeping Out the Marne Salient, St. Mihiel, Meuse-Argonne I, and Meuse-Argonne II.

Throughout these chapters the account is brief and frank. The divisions that always succeeded gloriously, the divisions that always did their utmost, and the divisions that failed, are noted impartially; the commanders who went forward to success and those who went rearward to Blois are noted in their turn.

It is inevitable that in an account which will be of wide value only as it attracts the mass of civilian readers, space must be devoted to accounts of individual acts of gallantry which the military reader takes for granted. That is so in General Bullard's book, but not to such an extent as to destroy the general picture by hiding the forest among the trees.

In a final chapter, General Bullard reviews developments during the years since 1918: Mr. Wilson's disillusionment at Versailles, his recommendation for "a standing army of 500,000 men and a navy second to none," and the progressive neglect of our armed forces which has been the response to that recommendation. And developments in Europe are noted: the attempts by Powers, lately our allies, to direct the League of Nations to selfish ends; the clamor for remission of war debts from lips which only lately clamored for help (and quickly) at any cost; and the denials that any American assistance in France was ever needed or ever received. As General Bullard concludes, it is unnecessary to draw the moral.

General Bullard's book is frankly controversial in its nature and manner. He has responded with blunt statements to some very common and very ungracious insinuations which he believes to be as inaccurate as they are ungracious. And he goes a long way toward making good his argument. We may well remember when we read the stories of how "the Americans came too late," that our recent allies had not won the war without the Americans, and that they did win it with the Americans. As General Bullard well points out, the highest inter-allied authority, in June of 1918, was pleading humbly with President Wilson that it was impossible to foresee ultimate allied victory unless 100 American divisions should be maintained in France—as late as October, Marshal Foch was reiterating this plea—and 55 American divisions actually were present in France when victory was achieved. And now they tell us that American effort had little to do with winning the war!

MEMORIES OF PEACE AND WAR. By Major General Beaumont B. Buck. The Naylor Company, San Antonio, Texas, 1935. 284 pp. \$3.00.

Reviewed by Captain James H. Phillips, Cavalry.
In this book the author, who entered the army as a

cadet at the United States Military Academy in 1880 and after forty years of active service retired as a Major General, writes of his adventures and misadventures as a child; early manhood; as a junior officer on the border; service during the Spanish-American War and in the Philippines; service in the United States prior to the World War and of his contacts with civilians; with the 1st Division in France; as commander of the 3d Division; and as a retired officer.

Of special interest are his memories of his introduction at West Point, life in the Army in the eighties and early nineties, his trip around the world in 1900, the part he took in the Boston Preparedness Parade in 1916, actions and service with the 1st Brigade in France, and his contacts with men prominent in American life.

In 1918, two of Theodore Roosevelt's sons, Theodore, Junior, and Archibald, served under General Buck in the 1st Brigade. The position of Brigade Adjutant was offered to Theodore Roosevelt, Junior, who immediately requested that he remain in command of a battalion. A letter from the former president is shown, in which he expresses his appreciation to General Buck in permitting his son to remain with his battalion and writes "Lord, how I wish I were under you myself."

In 1935 he writes to his son, who has graduated from the United States Military Academy and who is about to join his first military station: ". . . Guard well your reputation. Be not afraid to have judgment of your own and to express it but not offensively. Observe closely the customs of the service. Guard your health; no sick man can discharge his duties properly. Appear at civil functions in suitable attire; at all military duties be correctly equipped down to the last detail; present a smart appearance. Strike a balance between recreation and work; they rightfully go hand in hand. While naturally you show respect for all, high and low, in social and professional life, remember that the humblest recruit is entitled to your consideration. Be loyal to your friends and to your superiors; never prove a recreant to a faith reposed in you. Cultivate good habits, abandon those which your judgment tells you are bad. . . .

"Acquire the habit of doing each day's duties, including the little ones, with promptness, exactness and completeness. These sum up the achievements which establish your professional reputation. Dare to have aspirations; put no curb on them. Opportunity, though she knocks but rarely, surely will knock at your door. Be quick to recognize her. . . .

"The possession of money is not the goal but a man without money bears a heavy handicap. It is better to give a man five dollars than to lend him ten, or to indorse his note.

"Remember, in the military service you are dealing with men. Study them. A knowledge of men will always be of first importance—men, individually and collectively. . . .

"Remember, your duty to your country is paramount and may not be questioned. . . ."

Certainly this advice gained from long years of active military service is of value to any officer starting out on his military career.

From a military viewpoint, the book has no particular value. It is written in an interesting manner and style and clearly portrays the incidents, experiences and memories of an active life. After reading the book, one feels that General Buck is a personal acquaintance.

AUTOMOTIVE TRANSPORTATION. By Captain John T. deCamp and 1st Lieutenant Lew M. Morton. The *Coast Artillery Journal*, Washington, D. C., 1936. 281 pp. \$2.50; cloth binding, \$3.00.
Reviewed by Major Charles H. Unger, 9th Cavalry.

The purpose of this text is to supply a concise technical discussion on automotive transportation applicable to service requirements. The book was originally prepared under the direction of the Commandant, the Coast Artillery School, Fort Monroe, Virginia, by Captain John T. deCamp, C.A.C., and 1st Lieutenant Lew M. Morton, C.A.C., Instructors in Motor Transportation.

Adequate prominence has been given recent automotive developments which are of interest to the service. The various units and systems of the automobile are discussed in sufficient detail and well illustrated to clearly bring out their construction and operation. The several chapters on the electrical system, with an introduction of elementary electricity and magnetism, is approached from the student's standpoint and contains a voluminous amount of available information that has a direct bearing on the efficient operation of the engine. Likewise elements of carburetion and carburetors are presented in a simple interesting manner and all operating and maintenance factors involved are touched upon. The chapters on Convoys, Organization and Supply, Methods of Inspection, and Automotive Maintenance should be most helpful to personnel charged with fleet operation and maintenance.

This book, which is the result of extensive research, has been carefully compiled and covers the essential factors pertaining to military automotive transportation. It is a valuable instructional manual, as well as a convenient and compact source of basic information. The text has a very definite place in libraries of motorized and mechanized units and should be of particular worth in the personal library of the motor officer.

YANKEE ARMS MAKER. By Jack Rohan. Harper & Brothers, New York, 1935. 296 pp. \$3.00.

Reviewed by Lieutenant Colonel Herbert H. Frost.

The incredible career of Samuel Colt is pictured by the author in a most thorough and interesting manner. Without boring the reader with uninteresting detail, the book tells the life story of one of America's early industrialists of the period just preceding the War Between the States. The life of Colt is also a history of the times and the

author has brought to light many interesting events and characters that held the attention of those in public office, including three Presidents of the United States. Sam Colt, the struggling young inventor of a repeating hand gun, was not taken very seriously. Colonel Samuel Colt, America's Number One arms manufacturer, was invited to sit with the mighty.

Unlike the average inventor, Colonel Colt was not confined by mental attitude to being a dreamer. His inventive genius was supplemented by great ability as a business executive, to include the knowledge of mass production and distribution.

His name has become a household word as a result of the universal use of his arms, but few people know of his work in the field of wire telegraphy; the development of his waterproof electric cable for use with coast defense mines; the waterproof cartridge; and his willow furniture factory which provided a "side line" of chairs, etc., for his revolver salesmen.

Sam Colt's childhood years were not such as to develop a man of mild manner. His father's home was not a place where the young man was encouraged to spend his spare time working on "queer ideas." His home environment offered no outlet for the inventive mind. Boys who fired guns on the Sabbath were regarded as nothing less than young devils by the New England churchgoers. School held little interest for young Sam. A year at sea completely turned him against a mariner's career and was followed by the most interesting period of his early life. Money was needed to make models of his repeater, and with a determination to carry on this experimental work, Sam Colt started a one-man "medicine show," using nitrous oxide to show the effect produced by inhaling a small quantity of the gas. The "Laughing Gas Show" was well on the way to making money for "Dr. Coulter of London, New York and Calcutta," when the wave of emotional religion that was sweeping the country threatened to engulf Colt in its denunciation of "sinful pleasures."

The most interesting part of the book covers the years of discouraging work in Washington, in an effort to secure approval from the Ordnance Bureau of the War Department and an appropriation from the Government.

The inventor was not without supporters, however. The sturdy men of Texas were using his repeater and liked it. Five thousand had been sold in the border country by the time of the Mexican War. Colt repeating revolvers were used to defeat the Mexicans at Monterey and Buena Vista. Samuel Colt was quick to see the power of publicity. The news of the Mexican defeat was press-agented throughout the world, with statements giving all the credit to the use of the new arm. The Mexicans, anxious to find some excuse for their lack of victories, were only too happy to tell the world that the repeating arm in the hands of the enemy was the one and only reason for their defeat. The revolver had at last come into its own!

THE FOREIGN MILITARY PRESS

REVIEWED BY LIEUTENANT COLONEL ALEXANDER L. P. JOHNSON, INFANTRY

AUSTRIA: *Militärwissenschaftliche Mitteilungen*, January, 1936.

THE EAST AFRICAN WAR, by Captain Ludwig Kachina.

The origins of the present conflict between Italy and Ethiopia are traceable to the outcome of the war of 1896, and the treaty of 1906 which gave Great Britain control of the headwaters of the Nile, conferred upon France exclusive rights over the Addis Ababa-Djibouti railroad, and conceded to Italy the right to construct a highway across Ethiopia connecting the Italian colonies of Eritrea and Somaliland. Italy charges Ethiopia with acts of aggression beginning as far back as 1915, when 150,000 Ethiopian troops led by Emperor Micael invaded Eritrea. Italy attributes much of the trouble in this respect to the party of "Young Abyssinians" which seeks territorial expansion of Ethiopia to the coast. The Ual Ual incident near the Somaliland border in December, 1934, and a similar affair in February, 1935, were the immediate causes of Italian mobilization, although the rainy season caused postponement of actual hostilities until October.

On August 1, 1935, Italian forces in Africa comprised about 160,000 troops and 150-200 airplanes under the supreme command of General di Bono. About one-fourth of the entire force concentrated in Somaliland under General Graziani, who had sailed from Italy on February 22, 1935, to assume command. The bulk of Italy's forces concentrated in Eritrea. Ethiopian forces are estimated at about 750,000 men. Less than half of these are armed with rifles of a great variety of makes and vintages. With the exception of a few batteries, the Ethiopian artillery is equipped with obsolete guns.

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A rough, mountainous country, the climate of Ethiopia ranges from unbearable torridity in the desert lowlands to frigid cold at the high altitudes of its snow-clad alpine peaks. Rich in mineral resources and oil, the country unquestionably is an attractive colonial prospect for any nation lacking in these particulars. The population of about 10-12 million is racially mixed. The Coptic Christian Amharas of Semitic race, though a minority, are in actual power. Other racial groups in the country are the Mohammedan Danakils, Gallas, Kaffas and Somalis, the Jewish Lashas and the aboriginal black Augas. Politically Ethiopia consists of seven feudal kingdoms whose rulers enjoy nominal independence from the King of Kings whose personal power extends to the three feudal provinces of his own family.

Military operations began on October 2, 1935. The capture of Aduwa avenged the disastrous defeat of Italian arms forty years earlier. The fall of Axum, Ethiopia's

holy city, apparently ended the first phase of the campaign, for the Italian northern army then reorganized along the line: Axum—Aduwa—Adigrat. Rains greatly impeded progress of the campaign on the southern front. On October 16, the Italian forces resumed operations, moving against Makale in the north, and in the direction of Harar in the south. The Italian high command experienced great difficulties in the matter of supply despite 5,000 trucks and 70,000 pack animals employed in that service. The problem will become increasingly acute as the Italians penetrate the Ethiopian mountain fastnesses.

Apparently dissatisfied with the slow progress of the campaign, Mussolini appointed Marshal Badoglio, one of Italy's ablest commanders, to succeed General di Bono as commander in chief of the Italian armies in East Africa. The new commander assumed his duties on November 28, when operations had seemingly come to a standstill. Badoglio's first concern was reorganization. A few days later, on December 6, the troops of Ras Desta launched a surprise attack on the southern front. Contradictory reports from the belligerents leave much doubt as to the real outcome of this action. Ethiopia claims the recapture of Gorrahei and Dardeiro. On December 16, the Ethiopians launched a second surprise attack, this time against the outpost line of the northern army near Mai Timihet. Prompt intervention by Italian reserves soon restored the situation.

To date it appears that the Italian high command is making haste slowly. Lessons taught by colonial wars of the past are being carefully followed. Modern equipment is being exploited to the utmost. Reports indicate that Marshal Badoglio pins high hopes upon an extensive use of his aviation to force Ethiopia to surrender.

FRANCE: *La Revue d'Infanterie*, August, 1935.

EMPLOYMENT OF TANKS IN THE ATTACK, by Captain Lelequet.

Polish military authorities keep in close touch with developments in Russia's tank tactics. In his discussion the author depends largely upon Polish sources of information. Russian tank tactics are based upon the idea that attacking infantry must be provided with protection against hostile defensive fires. It is the mission of tanks to destroy or neutralize the enemy's defensive weapons either by distant action, by direct support or by accompanying the other arms.

Heavy tanks are employed against distant objectives such as hostile artillery, regimental and divisional reserves, general staffs and rear-area installations. Tanks assigned to these missions are armed with a small cannon, usually the one-pounder, and five machine guns. Their

speed ranges from 15 to 40 kilometers per hour. They are capable of overcoming obstacles nearly two meters high and can cross rivers 1 to 1.50 meters deep.

Heavy tanks precede the attacking infantry. They should be prepared to engage hostile artillery at the very moment that its threat is most dangerous to the advancing infantry, that is, when the assault infantry crosses its own line of departure. Necessarily, the time at which these tanks are to jump off must be carefully calculated. They move directly on their objectives, delaying only long enough to knock out antitank guns located within their zones of advance. So far as possible, tanks approach hostile batteries from the flank or rear. Soviet experts believe that these tanks should be able to neutralize hostile batteries within 10-15 minutes. The Soviets expect their heavy tanks to remain within the hostile battle position until the arrival of the assault infantry. However, some tank experts hold that this needlessly exposes them to grave danger.

Supporting artillery assists the advance of tanks by counter-battery, and covers their withdrawal in case of reverse. Airplanes provide liaison and, if necessary, assist with smoke.

Direct-support tanks operate against hostile machine-gun nests, accompanying guns and isolated field pieces. Tanks on these missions are of the 5- to 6-ton type, armed with one machine gun and one one-pounder. They travel at a speed of 10-25 kilometers per hour. Although the tank battalion is an organic part of the division, one tank company is normally attached to each regiment in the attack. In open country tanks usually operate under division control.

Accompanying tanks are of the lightest type. They operate in close coöperation with the attacking infantry and assure its steady progress by engaging and destroying hostile machine-gun nests and other infantry weapons within the battle position. Normally one company is attached to each battalion in the attack. It is a much debated question in the Soviet military press whether or not the battalion commander may in turn attach elements of this tank company to his assault units. It is believed that these tanks should strike the hostile front line just as the assault wave arrives within 200 meters.

GERMANY: *Militär-Wochenblatt*, July 4, 1935. ANTITANK DEFENSE WITHIN THE BATTALION, by 122.

The battalion's zone of action is relatively deep. Firing positions of antitank guns are normally in rear of front-line companies—300-500 meters from the main line of resistance. A lesser distance would unduly expose guns and crews. Necessarily the gun must be carried into position by hand. Since the success of a tank attack depends largely upon the element of surprise, it follows that antitank guns should be held under cover, in readiness and close to their probable firing positions.

The antitank gun has an effective range of 1,000 meters. Its greatest effect is obtained at 700 meters. Ac-

cordingly, hostile tanks will run into the effective fire of antitank guns in the belt 200-400 meters beyond our front line. A slow-moving tank can cover that distance in 90 seconds. It should be remembered that the attacking tanks will greatly outnumber the antitank guns in the battalion sector. The Italians expect that about 16 tanks will be used on a battalion front of 400 meters; on this basis they consider three antitank guns the minimum requirement for the defense. Under similar circumstances the French demand four guns. A ratio of 1:5 demands that each antitank gun dispose of five hostile tanks in the space of 90 seconds. Well-trained peace-time gun crews may be able to accomplish such a feat but certainly the hastily trained, poorly disciplined war levies never will.

Although the antitank gun may be master of the situation at 700 meters, it rapidly loses its advantage as the tank approaches. We must also bear in mind the moral effect the approaching tank has on the poorly trained soldier, particularly where he fires round after round without any apparent effect on his mechanical nemesis. It has caused panics in the past and will no doubt do so again. The remedy lies in increasing the number and effectiveness of the battalion's antitank weapons.

Militär-Wochenblatt, September 18, 1935.
GENERAL INFORMATION.

Austria. The reorganized federal army of Austria consists of about 60-70 thousand men organized in seven divisions and special arms. On a war footing the first line will comprise 14 divisions of 500,000 well-armed and thoroughly trained troops. They will be reinforced by Landwehr, Landsturm and Ersatz formations.

Czechoslovakia. The Czechoslovak army has at present 527 officers of German nationality, a marked decrease from the 1,735 carried on the rolls in 1921. The last graduating class of the Czechoslovak military academy consisted of 233 Czechs, 19 Slovaks, 4 Germans, 1 Pole, and 1 Ruthenian. The German element in the ranks of the Czechoslovak army represents 20% of the total.

Great Britain. The Bristol Works, according to report, has succeeded in developing a muffler which will effectively silence airplane motors. Experiments conducted by the British air ministry developed a propeller silencer. It is said these improvements make it impossible to detect airplanes at distances greater than two kilometers.

Italy. As a result of the recent increase and reorganization of the Royal Italian Air Force, that arm now consists of 3,061 officers, 7,026 NCO's and 30,396 men. In addition to these, 1,500 reserve officers and NCO's are now on active duty. The flying personnel includes 5 fleet generals, 7 division generals, 21 brigadiers, 68 colonels, 166 lieutenant colonels, 160 majors, 675 captains, and 652 lieutenants. The enlisted combatant personnel includes 1,600 sergeants of all classes and grades. The remainder of the personnel is apportioned among the administrative, technical, supply and special services.

Japan. The Japanese daily, *Asahi*, reports the adoption

of a five-year plan by the Imperial War Ministry to increase the efficiency of the army and its equipment. The plans contemplate the adoption of antitank and antiaircraft weapons; increase in the number of automatic weapons; increase in the fire power of cavalry; modernization and improvement of artillery equipment; extension of motorization, increase of chemical-warfare troops, and possibly the introduction of a new type of rifle.

U.S.S.R. Krasnaya Svezda No. 71 reports the results of an interesting experiment in tank crossings of frozen rivers at temperatures of -5 degrees centigrade and less. Thus, a thickness of ice of 10-18 cm. with a snow blanket of 5-8 cm. will support 3-ton tanks crossing singly. An ice thickness of 20-30 cm. with a snow blanket of 10-12 cm. will support a 5.5-ton tank. A thickness of 35-40 cm. with 15-20 cm. of snow covering will support the weight of a single tank weighing 7 tons. An ice thickness of 40-50 cm. with 20-35 cm. of snow covering will support 11-ton tanks crossing in a column with 50 meters' distance between tanks. Tanks weighing up to 15 tons require an ice sheet of 55-70 cm. thickness with a snow blanket 35-50 cm. In all cases the crossing must be made at reduced speed. Other units may cross simultaneously at 150 meter intervals. Tanks deployed in line may cross rivers not more than 35-50 meters wide, stream velocity not in excess of 0.75-0.90 meters per second, and temperature not above -12 to -15 degrees centigrade. Streams of greater velocity freeze unevenly, hence demand great caution. The ice sheet may be reinforced by the use of straw, allowing about 1.5 kg. of straw to the square meter. The straw is laid to form a track about 7.5-8 meters wide. About 30-40 minutes before actual crossing the straw track must be covered with water. In case of thaw the use of boards becomes necessary. In any case careful reconnaissance is essential.

Militär-Wochenblatt, October 18, 1935.

MOUNTED BATTALIONS, by Captain Gerhard, Cavalry.

Motorized divisions failed to come up to expectations in recent maneuvers in Great Britain and Italy. Of course the command got the blame, but the real difficulty seems to have been inadequate teamwork between the new and the older arms. The maneuvers clearly demonstrated the helplessness of troops lacking protection of motorized elements. They equally emphasized the need for troops capable of moving at a greater rate of speed than infantry. They evidenced the value of mounted reconnaissance detachments. Under modern conditions reconnaissance without combat is becoming increasingly difficult. Experience indicates the desirability of providing each infantry division with an organic squadron of cavalry. This squadron should consist of three rifle troops, one cyclist troop, one machine-gun troop, one howitzer platoon, three motorized antitank guns, a signal detachment and a number of reconnaissance cars. Armored cars may be added when demanded by the situation. The armament of this squadron would include 36 light and 18 heavy

machine guns, and 2 trench mortars. The command would have great mobility as well as fire power.

During the maneuvers referred to, horsemen and cyclists coöperated without difficulty, although there was room for further improvement. Effort should be made to bring into play the advantages of each arm and reduce its defects correspondingly. In the past cavalry charged with sabers and lances; in the future it should strike with still greater fury using machine guns and armored cars.

Artilleristische Rundschau, August, 1935.

THE BOFORS CALIBER 40 ANTI AIRCRAFT GUN, L/60, by Dr. F. Mouths, Major, Retired.

The Swedish Bofors arms works has developed a 40-mm. machine gun of considerable effectiveness. It is an air-cooled gun weighing 180 kilograms. Its barrel is 2.4 meters long and is equipped with a flash-hider. The trigger is foot-operated. The magazine consists of a double frame, each holding four cartridges (total 8). The mechanism operates on the same principle as the Browning machine gun except that the second round is actually fired before the gun completes the forward movement in counter-recoil, thus utilizing part of the counter-recoil force as a brake against recoil.

It has an all-around horizontal radius of action. The elevating gear provides a vertical field of fire from -5 to +90 degrees. The gun employs explosive tracer shells weighing 0.955 kilograms; weight of cartridge complete is 2.06 kilograms. The tracer charge burns 11.5 seconds; distance of visibility is 4,000 meters. Maximum range, 8,500 meters; rate of fire of 100-120 rounds per minute; muzzle velocity, 900 meters per second. The gun is provided with either mobile or fixed mount.

In discussing this gun the author invites attention to the convention of St. Petersburg of December 11, 1868, which specifically prohibits the use of explosive shells of less than 400 grams. He shows by mathematical computation that explosive shells of a caliber less than 30 millimeters are contrary to international agreement.

HUNGARY: *Magyar Katonai Szemle* December, 1935.

THE INFANTRY HAS THE WORD, by Lieutenant Béla Móticz.

Technical science in the army owes its ascendancy to the World War, which proved conclusively that decisive results cannot be obtained by obsolete methods and means. Post-war developments, notably along the line of organization, are not altogether logical. Mobility and mechanization often conflict. In order to increase the fire power of infantry, we have provided a great variety of weapons with necessary means of transportation. It is out of all reasonable proportion. We are gradually transforming the infantryman into an artilleryman.

The foot soldier wants to remain what he is. He knows that he needs weapons to help him to combat tanks and airplanes, but he does not want to be hampered

by complicated matériel, wagon and motor columns, and involved methods of munition supply when he sets out to do his job. He does not crave a multiplicity of weapons; he merely wants those best suited to his mission. He does not want to be saddled with the problem of keeping his thousand-and-one supporting weapons up with him, or worry about someone else doing it for him.

The Doughboy's big moment is the assault. He depends upon the fire power of his artillery to get him within assaulting distance. His real job begins when he sees the enemy and not when the enemy sees him. The infantryman has four enemies: man, the gun, the tank and the airplane. He must have effective weapons to combat these. He knows that one gun cannot do all four jobs, but he also knows it should not take more than four guns to do all he reasonably expects. Each weapon should serve its specific purpose and no other. The Doughboy submits that his chance in battle should not be reduced by peace-time theorists.

SPAIN: *Revista de Aeronautica*, July, 1934.

THE RÔLE OF AVIATION IN THE PACIFIC PROBLEM, by
Captain Fernando Villalba, Infantry.

The author presents an interesting study of the Pacific problem, and seeks to determine the probable rôle aviation may be expected to play in the event of an armed conflict in that quarter of the globe. He points out that Japan is the only country that really gained from the World War. She is now practically in control of the profitable Chinese market and in possession of the former German colonies in the Pacific. China, with its vast territorial expanse and teeming population, has for some time been the free prey to satisfy the appetites of the great powers. The Japanese, by virtue of geographic proximity and racial affinity, believe that they have prior rights in China and on the Asiatic mainland.

The United States, the author points out, has no territorial interests in the Far East now that the Philippine Islands are about to be cast adrift. Although the United States enforced upon Japan recognition of the "open door policy" in 1921, Japan has become a serious trade rival in China as well as elsewhere. Consequently, with the creation of the new Manchu Empire by Japan, the United States extended recognition to Soviet Russia. This coincidence of events causes the author to wonder whether the United States now seeks to inflict injury upon Japan by the hand of Russia just as England had used Japan for a similar purpose in 1904-1905. The existing situation in the Pacific, the author states, was defined by President Roosevelt in 1905, when he declared that "the era of the Pacific will constitute a new epoch in human history, and that it will mark the hegemony of the United States in those parts."

Considering the possibilities of a conflict in the Pacific, the author summarizes the military, naval, and aerial strength of the United States and Japan. He concludes, that while the United States has a marked naval superior-

ity in point of total tonnage and armament, the two countries are about equal in respect to training, efficiency, morale of personnel and quality of matériel. Two factors the author states, tend to equalize the difference in physical strength: the strong geographic position of Japan and the probability that the United States would have to assume the offensive which would entail the necessity of guarding a long line of communications. Russian intervention would materially weaken Japan's position and would seriously menace her lines of communication with her sources of supplies on the Asiatic mainland.

The author believes that at the outbreak of a war Japan might take the offensive to take the Philippine Islands and Guam. The inability of the United States to prevent such an exigency, the author believes, prompted the decision to grant independence to the Philippines. A naval engagement near Japan would be fought under conditions decidedly disadvantageous to the United States, although Russian intervention might seriously complicate matters for Japan even though the Soviet fleet in Far Eastern waters should prove of little value. Hence, in the author's opinion, naval forces alone will not be able to decide the issue.

Russia's position in the Far East has been materially weakened since the sale of the Chinese Eastern Railway. The Japanese air force operating from Manchurian bases could readily eliminate Russia altogether as a factor in a conflict with the United States. In the author's opinion, the air force of the United States would play an important part in case of a conflict, possibly operating from a base at Petropavlovsk on the peninsula of Kamtschatka. However, he adds, Petropavlovsk still is a long way from the vital centers of Japan. On the other hand, the author believes, the Japanese might try to repeat the British exploit at Zeebrugge against the Panama Canal. He quotes Chief Engineer Ronqueron to the effect that a comparatively small charge of explosives could put the canal out of commission. He believes that Japan might attempt to destroy the canal on the eve of hostilities, perhaps before the actual declaration of war.

***Memorial de Infanteria*, November, 1935.**
MILITARY INTELLIGENCE.

Great Britain. The new Mark IV tank recently adopted by the Royal Tank Corps weighs 9.8 metric tons, is 4.9 meters long, 2.08 meters wide, and 2.18 meters high. It has a speed of 44 kilometers and a radius of action of 160 kilometers. The tank carries two cannon 25- and 40-mm., respectively, and one machine gun. The armor plate varies from 9 to 22 millimeters. The tank can climb 30° slopes, cross trenches 1.80 meters wide, obstacles 0.76 meters high and streams 1.20 meters deep.

Italy. The Italian firm, Scotli, has produced an automatic rifle weighing less than 9 pounds. It fires 7.9-mm. ammunition, with a muzzle velocity of 835 meters per second. Its practical rate of fire is 50 rounds per minute. The clip contains five rounds.

Promotion of Brigadier General Dudley J. Hard

BY CAPTAIN W. B. HIGGINS, Adjutant
54th Cavalry Brigade

CLIMAXING a long and distinguished career in the National Guard, which has included service in both the Spanish-American and the World War, Brigadier General Dudley J. Hard, Commanding General of the



Major General Dudley J. Hard, commanding 37th Division.

54th Cavalry Brigade, was promoted Major General, Ohio National Guard on December 17th, 1935, and assigned to command of the Buckeye State's 37th Di-

vision. Tempered with the regret which the Officers and men of the 54th Cavalry Brigade feel in the loss of so able a leader, who has done so much for the Cavalry in Ohio and Kentucky and in the service in general, is the

natural justifiable pride they feel that a Cavalryman has been promoted to the highest military rank in Ohio. To the 37th Division they extend their congratulations in having such a fine soldier appointed to lead them forward to still greater accomplishments.

While Major General Hard's two terms of active service were in other branches than the Cavalry (the Infantry in the Spanish-American War and the Field Artillery in the World War), it is the Cavalry which has always been his real love and it is in this branch that he has passed the major portion of his military career.

General Hard is essentially a product of Cleveland's famous Black Horse Troop (now Troop A, 107th Cavalry, O.N.G.). After a period of service in Company D, 8th Ohio Infantry, at Wooster, Ohio, in which he enlisted on June 30, 1888, General Hard moved to Cleveland and on December 31st, 1894, enlisted as a private in Troop A of the Ohio Cavalry.

The outbreak of the Spanish-American War found General Hard a lieutenant in Troop B of the Ohio Cavalry. He was unable to leave with the Cavalry, but finding the urge for active service too strong to resist, he accepted a commission as 2d Lieutenant in Company I, 8th Ohio Infantry in May, 1898, and literally joined his new command as it was entraining at Columbus for the South. Incidentally the 8th Ohio Infantry was commanded by General Hard's father, the late Colonel Curtis V. Hard of Wooster, Ohio. With his regiment, General Hard saw active service in the campaign at Santiago, being promoted a 1st Lieutenant in August, 1898.

Returning from Cuba and having been mustered out of Federal Service, General Hard again enlisted as a Pri-

vate in Troop A of Cleveland upon its reorganization in 1899. From that time until 1904 he served with Troop A of the Ohio Cavalry in various grades, when he was appointed a 2d Lieutenant in that organization. A promotion to 1st Lieutenant quickly followed and continuing his service with the Ohio Cavalry, he became Major of the 1st Squadron, Ohio Cavalry, in 1915.

In this capacity he mustered his unit into Federal service in June, 1916, and led them to the Mexican Border in August of the same year, where they were stationed at Camp Willis, near Fort Bliss. The Ohio Cavalry were ordered to their home stations in February of 1917 and mustered out of Federal service.

Upon his return from border service, General Hard realized his ambition of a full regiment of Cavalry in the State of Ohio and on April 6th, 1917, the day the United States declared war on the Imperial German Government, he was appointed Colonel of the 1st Ohio Cavalry, a regiment of 15 troops.

The 1st Ohio Cavalry became the 2d and 3d Ohio Field Artillery, with General Hard commanding the first of the above mentioned artillery regiments. Shortly afterwards, the 2d Ohio Field Artillery became the 135th Field Artillery of the 62d Field Artillery Brigade, the Divisional Artillery of the 37th Division.

It was as Commanding Officer of the 135th Field Artillery that General Hard saw service in the World War, both in this country and in France. At times during this period he was acting brigade commander, both at Camp Sheridan, Montgomery, Alabama, and later in France during and after active operations.

Again mustered out of Federal service upon his return from France, he became a colonel of Field Artillery in the Reserve Corps, upon the reorganization of the civilian components of the Army in 1921.

In 1923 he was appointed Chief of Staff of the 37th Division, Ohio National Guard, and in 1926 he became Colonel of the 107th Cavalry, Ohio National Guard.

In that same year he was appointed Brigadier General in command of the 54th Cavalry Brigade, composed of the 107th Cavalry of Ohio and the 123d Cavalry of Kentucky, in which capacity he has continued to serve until his recent acquisition of two stars.

In 1926 General Hard attended the Army War College. In 1934, together with members of the staff of the 54th Cavalry Brigade, he commanded and represented the 222d Cavalry Division in the GHQ Command Post Exercise at Fort Monmouth, New Jersey.

General Hard has long been active in the affairs of the National Guard Association, serving as its President in 1931 and always giving generously of his time and energies to further the cause of national defense.

At the time of his promotion to command the 37th Division, General Hard was a member of the Executive Council of the United States Cavalry Association.

ORGANIZATION ACTIVITIES

1st Cavalry (Mechanized)—Fort Knox, Kentucky

COLONEL BRUCE PALMER, *Commanding*

ON March 2, 1936, the 1st Cavalry (Mechanized) celebrated its 103d birthday anniversary. In the morning the regiment was assembled for a short ceremony in which the Regimental Executive, Colonel Henry W. Baird, in the absence of Colonel Palmer, gave a short talk followed by an address on the colorful history of the regiment by Captain Rossiter H. Garity. At noon all of the troop messes served special dinners.

The regiment is engaged in normal training in preparation for summer maneuvers. During the past two months it has taken the field for several tactical exercises involving an attack on a hostile position, the delay of an Infantry division advancing in two columns, defense against hostile aircraft, coöperation with horse Cavalry, and reduction of antitank weapons.

The regiment has recently been recruited to full strength as a result of Congressional authorization. A detachment comprising 65 recruits is being trained under the supervision of 1st Lieutenant Donald M. Schorr.

Under the direction of Major Gersum Cronander there has been considerable activity on the indoor rifle galleries in the attics of the barracks. Matches have been shot with the 7th and 8th Cavalry, and the 10th and 24th Infantry. Troops are utilizing these indoor ranges for routine instruction with the rifle, pistol and machine gun.

A review was held on February 29, 1936, in honor of two retiring noncommissioned officers of Troop E, 1st Sergeant Ned B. Lewis and Sergeant John S. Pape.

Captain Charles V. Bromley, Jr., is absent from the regiment attending the Chemical Warfare School, Edgewood Arsenal, Maryland.

Major Bertrand Morrow has been assigned to special duty as post adjutant, taking the place left vacant by the departure of Captain Hal M. Rose for Washington, D. C., for duty with the Battle Monuments Commission.

Orders have been received assigning Lieutenants Karl L. Scherer, Philip H. Bethune, and J. Paul Breden to the regiment upon completion of their course at the Cavalry School in June. Captain Hayden A. Sears, recently on duty in Paris, has been ordered to the regiment.

The first of the combat cars (C. C. M-1) arrived this week from the Rock Island Arsenal and has been assigned to the Regimental Motor School. It is anticipated that the remainder of the cars will be delivered within the next few months.

2d Cavalry—Fort Riley, Kansas

COLONEL DORSEY R. RODNEY, *Commanding*

THE regiment is looking forward with enthusiasm to the celebration of its One Hundredth Anniversary on May 8th and 9th. Under the direction of Colonel Rodney committees have commenced the preliminary work necessary to insure the success of a program that will do justice to this important and historic event in the history of the Second Dragoons.

Since the first of the year one hundred and fifty recruits have been received, making the present strength of the regiment approximately seven hundred. A post recruiting party, under the command of 1st Lieutenant Edward J. McNally, has operated in the western part of the State, and 1st Lieutenant Louis M. de Riemer has covered the northern and eastern sections with a party from the regiment. These detachments have aided materially in securing desirable applicants. National Guard units in the various towns have coöperated generously by making their armories available to the recruiting parties. Without this aid the work of these detachments would have been seriously handicapped. Due to the lack of suitable quarters, it has been necessary to house the recruits in the barracks recently vacated by Headquarters Company of the Civilian Conservation Corps. The recruit detachment is being administered as a separate unit and its mess is being operated by the School for Bakers and Cooks.

The following enlisted men participated in the "Golden Gloves" boxing tournament at Kansas City, Missouri, during the week of February 15-19: Corporal Hal Cockrum, Troop A.; Private Stanley Hightight, Machine Gun Troop, and Private Maurice L. Cunningham, Troop B. Private Hightight, fighting in the light-heavyweight division, was selected as the representative of the Kansas City Star to compete in the tournament at Chicago. The regiment is proud of the splendid performance of this boxing team.

During February small bore rifle matches were held with the 17th Infantry at Fort Crook and the 24th Infantry at Fort Benning, the scores being transmitted by mail. A series of troop matches have been completed during the past two months. Medals have been awarded to the first three places in the following competitions: Recruit Match, Adjutant's Match, Marksmanship Match, and Executive Match.

Major Frank H. Barnhart and Captain Winfield C. Scott have been relieved from duty with the Civilian Conservation Corps and have joined the regiment. Orders have been received assigning the following officers to the regiment: Major Perry E. Taylor, Captain John L.

Hitchings, 1st Lieutenants James C. Blanning, Bogardus S. Cairns, James B. Corbett, and Scott M. Sanford.

Orders have been received relieving the following officers from duty with the regiment and assigning them as indicated: Major Adolphus W. Roffe to the Army War College as a student, Major Lawrence Patterson detailed with the Quartermaster Corps, Captains Louis B. Rapp and Joseph M. Williams to the Cavalry School as students in the 1936-37 Regular Course, First Lieutenants Charles B. McClelland and James B. Quill to the Cavalry School as students in the Special Advanced Equitation Class. Major Edwin M. Sumner has recently been transferred to the Ninth Cavalry at this station; Captain Thomas D. Roberts has received orders detailing him for duty with the R.O.T.C. at Texas A. and M., effective in August, and Major Carl J. Dockler has been ordered to Decatur, Georgia, in the near future, for duty with the R.O.T.C. Major Dockler has served a total of twelve years and three months with the 2d Cavalry. He is the only officer now on duty with the regiment who was with it in France. The best wishes of all officers and men go with him to his new assignment.

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**3d Cavalry (less 1st Squadron)—
Fort Myer, Va.**

COLONEL KENYON A. JOYCE, Commanding

THE Friday afternoon exhibition rides have engaged the attention of the garrison during the winter months, the last drill being held on March 6th, in honor of the Diplomatic Corps stationed in Washington. Other exhibition drills were held in honor of the Secretary of War, the Assistant Secretary of War, the Commanding General, Third Corps Area, the Chief of Cavalry, the Chief of Field Artillery, and the Navy. The 3d Cavalry, as its share of the exhibition season, contributed a musical ride by Troop E, an exhibition of jumping tandems and a rodeo ride by Troop F, a gymnastic ride and a weapons demonstration by Machine Gun Troop, a non-commissioned officers jump ride and a bridleless ride by Headquarters Troop, and a beautifully worked out parade at all gaits by a squadron composed of E, F, and Machine Gun Troops.

With the close of the exhibition drills, the regiment commenced its outdoor training season in preparation for the annual training inspection by the Third Corps Area Commander on May 4th and 5th, and for range practice which this year will be delayed until June 1st due to lack of suitable target range facilities prior to that date.

Indoor horse shows were held on February 26th and March 17th. A third is in prospect for April 14th. The shows have been most successful with the military horses of the garrison and local civilian horses in close competition. There has been a splendid attendance of enthusiastic spectators.

Indoor polo has been played Wednesday and Saturday afternoons between teams representing the 3d Cavalry,

16th Field Artillery and the War Department. Several night games have been arranged with outside teams from the 110th Field Artillery of Baltimore, the Engineer School, Fort Belvoir, and the Quantico Marines.

The coming summer will find many departures from the post and many new arrivals. Colonel Kenyon A. Joyce, the post and regimental commander, will go to General Staff duty at Baltimore in June. Colonel Joyce's relief, Colonel Jonathan M. Wainwright, now Assistant Commandant of the Cavalry School, is expected to join the command in July.

Major Alexander B. MacNabb will go to the Engineer School at Fort Belvoir, as Cavalry Instructor, while Major Herbert L. Earnest has already departed for the Chemical Warfare School at Edgewood Arsenal, Maryland, as Cavalry Instructor and liaison officer.

Other regimental changes will effect Major Dwight Hughes, Jr., Captain Marion Carson, Captain Willard G. Wyman, and Captain Eugene L. Harrison, who go to the Command and General Staff School, Captain Claude O. Burch who goes to the Cavalry School, and Captain Thomas J. Heavey who has been given the Captaincy of the Cavalry Rifle Team.

The Corps Area basketball championship was won by the post team of which five playing members of the squad are members of Headquarters Troop, 3d Cavalry. After winning the post championship, Headquarters Troop threw its team into the post team which played through a remarkable and enviable season, winning all Third Corps Area League Games.

* * *

**1st Squadron, 3d Cavalry—Fort Ethan Allen,
Vermont**

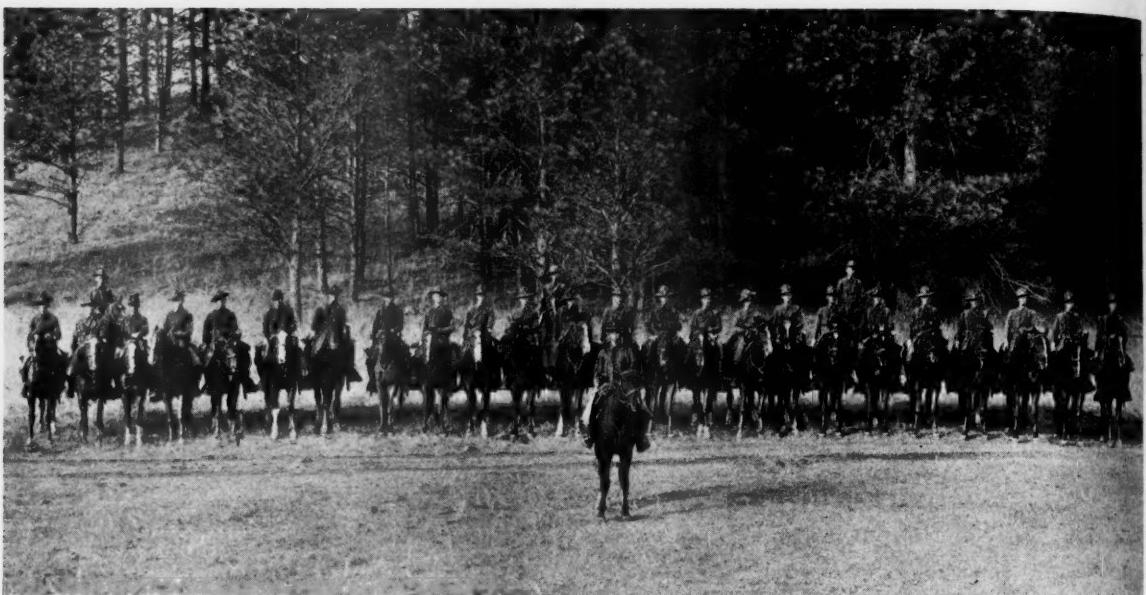
**LIEUTENANT COLONEL ARTHUR E. WILBOURN,
Commanding**

DUE to the heavy snow and ice, and sub-zero weather, the training of the squadron has been confined to indoor activities. The remodeled riding hall has provided excellent facilities for equitation, jumping, and remount training, but with the approach of spring, both officers and men are "champing at the bit" to get out-of-doors to try out their new mounts in cross-country work.

The school season is rapidly drawing to a close and plans have been made for spring training in the application of subjects taught, by practical tests in combat firing, musketry, and tactical rides.

Indoor rifle marksmanship has been completed and the troops are now hard at work in indoor pistol marksmanship, and firing combat problems on landscape targets. The outdoor target season will start on May 1st.

Our eagle-eyed shooters are now trying out for the cavalry team on the gallery course. 2d Lieutenant Edwin M. Cahill, a veteran of Perry, is the officer in charge of the tryouts. That old perennial shot, Sergeant Blazevski, a well known figure at Perry, is assisting Lieutenant



PLATOON, TROOP A, 4TH CAVALRY. Commanded by 1st Lieutenant Carroll H. Prunty. Winner of Cavalry Leadership Test for Small Units, 1935, held at Fort Meade, South Dakota.

ant Cahill in coaching the squad to "hold 'em and squeeze 'em."

2d Lieutenant James L. Dalton left the post on February 7, 1936, on detached service as a student at the C.C.C. Motor Repair School, Army Base, Boston, Mass.

During the post boxing season, both troops were well represented. Private First Class Walter P. Jennings, Troop B, won the middleweight championship of the post.

Recreation activities at the present time include volley ball, bowling, basketball and hockey.

With the temperature at 15 below zero, the squadron was called out for its annual gallop through the snow drifts for the movie newsreels. There were several spectacular spills but fortunately no injuries were received.

Orders have been received assigning 1st Lieutenant Charles M. Iseley to the squadron, effective at the close of the school course at the Cavalry School, Fort Riley, Kansas, and Major Samuel V. Constant, Assistant Military Attaché, Peiping, China, has been assigned to the squadron, effective upon return from his foreign tour.

* * *

4th Cavalry—Fort Meade, South Dakota

COLONEL ROBERT McC. BECK, JR., Commanding

ON March 3d the regiment assembled in the post theatre to commemorate the eighty-first anniversary of its organization. The ceremony included an impressive presentation of a new regimental standard and an introduction and welcome by the regimental commander to officers and enlisted men joining during the past year. An excellent review of the regimental history was given by Captain Wm. L. Barriger. Congratulatory birthday

messages were received from the Chief of Cavalry and the corps area commander.

During the winter we have had a bowling tournament divided into two series, during which each team has met each other team once, with a trophy for the winner of each series. At the conclusion of the first series there was held a handicap tournament which included a five man-team event, a two-man-team event, and the individual championship. At the conclusion of the second series a five-man-team handicap tournament for the post championship will be conducted.

Basketball has been similarly divided into two series with a trophy for each series. At the conclusion of the second series there will be an elimination basketball tournament in which a trophy will be awarded to the successful team.

Boxing classes have been held under the direction of 2d Lieutenant John F. Rhoades. The attendance has been voluntary and the turn-out of aspiring boxers has been excellent.

During February, 2d Lieutenant John F. Rhoades went to Omaha, Nebraska, to compete for a place on the Olympic Boxing Team in the Mid-Western A.A.U. Golden Gloves Tournament. He lost the final bout after winning two preliminary and the semi-final matches.

2d Lieutenants Daniel E. Still, Kelso G. Clow, John F. Rhoades, and Edward W. Sawyer have completed a comprehensive course of instruction in care of animals and stable management, and are now engaged with courses in horseshoeing and mess management and supply.

About sixty recruits recently completed an eight weeks' training program. In addition to other items before being turned to duty, each recruit participates in

one full day in the field, at least one additional twenty-mile-full-pack march, with many shorter marches, has engaged in mounted and dismounted scouting and patrolling, has fired the rifle and pistol on the indoor range and rifle, pistol and light machine gun on the outdoor range. During the months of January and February all marching and outdoor range work was done in sub-zero temperatures, but was accomplished in good spirit on the part of all concerned. 2d Lieutenant Daniel E. Still, range officer, conducted all outdoor firing. Eight recruits assigned to the troops participated in a very creditable musical ride given by Troop E at the monthly horse show held on March 6th.

An important facility in the theoretical tactical training of individuals and elements of the regiment is the tactical training room, located in a squad room, equipped with wall lockers, tables, lights, blackboard and lecture platform. Here the regimental and post officers assemble for advanced tactical training and such other instruction as may be advisable, and each week the officers and non-commissioned officers of each troop assemble during a scheduled period for troop school in tactics, given by way of map problems, or map maneuvers and exercises. A continuation problem beginning with a covering and reconnaissance phase, is now being given under a method that will require active participation by all officers and noncommissioned officers, either as commanders or as umpires; the problem will so develop as to introduce larger bodies of all arms including air, mechanization, and chemicals, with horse and mechanized cavalry engaged in successive and different tactical operations. The development of the problem will be directed along tactical lines having a bearing on the field training period that follows.

5th Cavalry—Fort Clark, Texas

COLONEL ROBERT C. RICHARDSON, JR., Commanding

SINCE the Christmas vacation, the regiment has been training under the new division directive, with the fire support echelon and the maneuver echelon. Under this system, there is a provisional machine gun squadron, consisting of all the machine guns of the regiment.

The regiment will be joined on April 4th by the 12th Cavalry, which will come by rail from Fort Brown to Fort Clark. It will remain at Fort Clark about a week, when the brigade will start its march to Marfa, Texas. Here it will meet the 2d Brigade and other troops of the division from Fort Bliss for the division maneuvers.

The regiment regrets greatly the coming departure of Brigadier General Evan H. Humphrey, who leaves soon for the Philippines. General Humphrey has been the brigade commander since last July, with station at Fort Clark, and his loss to us will be felt keenly by every officer and man of the regiment. In the short time that General Humphrey has been here, all have learned to admire and respect him as an outstanding Cavalry leader.

Colonel Robert C. Richardson, Jr., took command of the regiment around the New Year.

Polo has afforded unusual interest for the regiment and post this season. In February a tournament consisting of three games was held in which Mexican Army teams from Piedras Negras competed with the local teams. The regimental teams won two of the games and the Mexicans one. Later in the month a game was played against the 2d Division from Fort Sam Houston and again our team was victorious.

On February 28th a review and presentation ceremony was held for all the recruits who had recently joined the regiment. The regiment was drawn up in line and the recruits were then presented. Each 1st sergeant went forward and welcomed the recruits to his respective troop.

March 3d was Organization Day for the regiment, and it was celebrated by appropriate ceremonies and festivities. In the morning the regiment was addressed by Brigadier General Evan H. Humphrey, and by Colonel Richardson, the commanding officer. The junior officer, 2d Lieutenant Robert W. Rayburn, gave the history of the regiment. In the afternoon a boxing tournament was held. Several former members of the regiment and quite a few civilian friends were present, making a very happy reunion.

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6th Cavalry—Fort Oglethorpe, Georgia

COLONEL LLEWELLYN W. OLIVER, Commanding

PUP TENTS mushrooming up in neat rows here and yonder to be as rapidly deflated and silently stored away. Practice. Regimental full pack tomorrow. Baseballs tossed about the parade. Crack of the bat on solid sphere. Gone the thump of the soccer and the thud of basketball shoes in the gym. Golf clubs lugged over the greening ways. Bowling crowds falling off. Shot guns oiled and laid to rest. Bird dogs fattening on the porches. No overcoats in the fox hunt field. The last snowman has gone to earth. Troweling about the flower beds. The writer-upper for the JOURNAL gushes mildly and lacks coherence. Signs of spring.

Troop B won the basketball championship and Troop A took the bowling honors. We helped Chattanooga put over a Presidential birthday ball. Existing orders indicate that Colonel and Mrs. Kinzie B. Edmunds will leave us in early summer. (We don't like that.) Lieutenant Colonel Howell M. Estes has been ordered to join. (We like that.) With spring maneuvers at Fort Benning in view, our troops and squadrons are brushing up on the art by playing war in our own backyard.

Our hounds (twelve couple strong—Wally Burnside, Master) are giving us two good runs each week. Each mid-week hunt is sponsored by a troop of the 6th. The troopers turn out in good force and follow with great zest.

7th Cavalry—Fort Bliss, Texas

COLONEL JOHN K. HERR, *Commanding*

THE provisional troop of this regiment, composed of one hundred twenty-two recruits, is nearing the completion of six weeks' intensive training. Under the handling of efficient commissioned and noncommissioned officers these embryo soldiers have developed into a powerful unit comparable with older troops in functions of the field and garrison. Especially pleasing is the degree of efficiency attained in the use of all arms.

The provisional troop was formed February 11th. In addition to two regular officers there have been twelve Reserve officers attached to the troop at different two-week periods. The value of the latter has been greatly increased by virtue of the stressed training conditions.

The several troops participated in a field event at the Garry Owen Field on February 22d. Minor events were climaxed by the Custer Stakes, an innovation that proved to be of thrilling interest. This race involving different phases of riding, shooting and jumping, was won by Headquarters Troop.

The regiment opened its Troop Baseball League on March 3d. Much new material has been gained during the past months and the regiment confidently expects to retain the post championship it has held for the past three years.

The regimental basketball team, runners-up in the Post Championship League, entered, and was successful in winning the annual El Paso *Times* tournament. The *Times* tournament brings together each year the strongest semi-pro teams in El Paso and outlying towns. Accorded little chance of reaching the semi-finals, the Garry Owen Dribblers displayed unusual form to win surprising victories over several favorites. Play was concluded March 14th as the 7th Cavalry team pulled its biggest surprise of the year, a thrilling 39-38 victory over the strong McNutt Oilers. The team advanced to the finals by defeating other teams as follows: Hotel Paso Del Norte, 51-47; Hagerman, New Mexico, 32-30; A. B. C. Beermen, 46-38. A trophy of sun-gold design was presented to the champions. Individuals were presented gold basketball watch charms. In addition, the most valuable player trophy was presented to Private Mike Gescy, veteran in regimental and post athletic circles.

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8th Cavalry—Fort Bliss, Texas

COLONEL FRANK KELLER, *Commanding*

ON January 25th, February 1st, and March 7th, the 1st and 2d Squadrons held gymkhanas and horse shows. The events included sack, three-legged, slow mule, and saddling races, mounted tug-of-war, schooled ride for enlisted men, and jumping classes for both officers and enlisted men. In the 1st Squadron, Troop A won the squadron trophy, while in the 2d Squadron, Troop E carried off the honors.

On February 19th the 8th Cavalry basketball team won



POST CHAMPIONS

8th Cavalry Basketball Team.

FRONT Row (*left to right*): Corporal Ed Kelly, Forward; Corporal Edward G. Krebs, Center; Pvt. 1cl. James R. Nunn, Guard; Pvt. Raymond L. Meyer, Guard; Pvt. Ernest W. Nunn, Forward.

MIDDLE Row (*left to right*): Corporal Jack N. Mann, Guard; Pvt. William E. Wooley, Guard; Pvt. 1cl. John W. Griffith, Forward; Pvt. Ray O. Caffey, Guard; Pvt. 1cl. Eulice N. Adams, Forward; Pvt. 1cl. Wesley W. Lowe, Center.

BACK Row (*left to right*): Lieut. Paul E. Johnson, Jr., Guard; Lieut. Joseph A. Cleary, Regimental Athletic Officer; Colonel Frank Keller, Regimental Commander; Captain August W. Farwick, Team Coach; Sgt. Gilbert H. Appler, Team Manager.

its fifth straight post championship with the loss of only one game. The team was of the highest caliber and clearly demonstrated its ability by defeating teams of the 7th Cavalry, Special Troops, 82d Field Artillery, and William Beaumont General Hospital. A handsome trophy was received by the regiment at which time the regimental commander complimented the fine showing and sportsmanship displayed by each member of the team.

During the months of January and February the small bore teams of the troops of the regiment have been busily engaged in firing competitions. In the competition for A teams (5 men) Troop E placed first in January and second in February. Troop A, second in January and third in February, and Troop F third in January and first in February; for B teams (5 men) Troop E finished, both January and February, on top again, with Troop A second in January and fourth in February, and Troop B third in January and second in February; for the C teams (5 men) Troop E led in January and February with Troop B second, January and February, and Troop F third in January and Headquarters Troop third in February.

During the present month, the regimental small bore team, under the supervision of 2d Lieutenant James H. Polk, has been engaged in firing a number of competitions with outside regiments.

On March 12th, the regiment participated in a brigade field exercise which was witnessed by Colonel W. W. T. Torr, British Military Attaché at Washington, D. C. who was a brief visitor at the post.

Training within the regiment for the next month will be intensive preparation for the march and Division maneuvers to be held in the vicinity of Marfa during the latter half of April and the first part of May. As a result thereof, the regiment will be away from Fort Bliss for over a month.

A recent loss in the officer personnel of the regiment occurred on February 26th when 1st Lieutenant James L. Hathaway was transferred to assume command of Headquarters Troop, 2d Cavalry Brigade.

Orders recently received also announce the new assignment of Lieutenant Colonel John T. McLane, who, on May 5th, departs for his new station in Asheville, North Carolina, for duty with the National Guard.

11th Cavalry—Presidio of Monterey, California

COLONEL TROUP MILLER, Commanding

ON February 15th Colonel and Mrs. Ralph M. Parker left by motor for the East coast on leave of absence after which they will go to their new station at Detroit, Michigan. Colonel Parker has been post and regimental commander for two and one-half years and his departure is regretted by his many friends in the garrison and the nearby communities.

The members of the garrison have just had the pleasure of greeting Colonel and Mrs. Troup Miller who arrived on February 29th. Colonel Miller comes to us from duty as instructor at the Command and General Staff School and succeeds Colonel Parker as Commanding Officer of the 11th Cavalry and the Presidio of Monterey.

The annual garrison inspection by the Corps Area Commander was held March 4th. Brigadier General S. A. Cheney, commanding the 9th Coast Artillery District, represented the Corps Area Commander and reviewed all the troops after which he made a detailed inspection of the entire post.

The garrison has been engaged in training recruits, tactical exercises and marches of troops and squadrons in preparation for the annual tactical inspection on April 28th. The regiment will take a practice march from March 25th to 31st before assembling at Camp Huffman on the Gigling Reservation April 7th for combined maneuvers with the 30th Infantry and the 2nd Battalion, 76th Field Artillery.

Post horse shows were held January 24th and March 13th. All organizations were well represented and events were keenly contested. There were also classes for ladies and children.

The basketball season is nearing the end with Machine Gun Troop, 11th Cavalry, and Headquarters Troop, 11th Cavalry, contending for the post championship.

Officers teams from the 11th Cavalry and the 76th Field Artillery played one of the most interesting basketball games of the season which resulted in a victory for

the 11th Cavalry. The bowling team of 11th Cavalry Officers was also victorious in a match with officers of the 76th Field Artillery.

With the end of the rainy season in sight, baseball practice started early in March. Many of last year's players are present with the squad this year and it looks as if the post will have another winning team.

Captain Claude W. Feagin and family have recently arrived at this station.

12th Cavalry (Less 2d Squadron)— Fort Brown, Texas

COLONEL KERR T. RIGGS, Commanding

NOTWITHSTANDING exceptionally poor weather all the winter, the 12th Cavalry is rapidly rounding into shape for the 1st Cavalry Division maneuvers at Marfa, Texas in May. Frequent practice marches and overnight camps are the order of the day.

Twenty remounts were received from Fort Reno about the middle of February. They are excellent animals and are being given very careful conditioning and training.

Fort Brown is due for quite a change in personnel this summer. The following officers have been ordered here: Majors Wilson T. Bals and Harry A. Buckley, Captains Benjamin A. Thomas and Otto R. Stillinger and 1st Lieutenant John H. Dudley.

Captain Hugh F. T. Hoffman has been ordered to Fort Riley.

Brigadier General Evan H. Humphrey, commanding 1st Cavalry Brigade at Fort Clark, Texas, paid us a visit in February. He was accompanied by several members of his staff.

2d Squadron, 12th Cavalry— Fort Ringgold, Texas

MAJOR REXFORD E. WILLOUGHBY, Commanding

AN enlisted men's golf tournament was held at this station during the Christmas holidays. In spite of most inclement weather there was an excellent turnout and play was followed with a great deal of interest. The results of the Tournament were: Post Champion, Private First Class Merley Hutson, Troop E; Winner 1st Flight, Corporal John Young, Troop E; Winner 2d Flight, Corporal Jesse Pope, Troop E. Prizes were awarded to the winners. During the Tournament Corporal Leonard Zuck, Troop E, made a hole in one on the ninth green.

A soft ball league, composed of eight teams, has been organized as follows: two from each troop, one from the Detachments and one composed of officers. Chaplain Schulz is captain of the officers' team.

The post basketball team played thirteen games with outside teams during January, February and March.

A team from this station and Fort Brown participated in the Mid-Winter Border Rifle Match held in Laredo, Texas, on January 26. This match is an annual affair,

engaged in by teams from Texas and Mexico. In spite of a 25-mile wind, driving rain and near freezing weather, eight teams from Laredo, Austin, San Antonio, Monterey, N. L., Fort McIntosh, Border Patrol and the 12th Cavalry turned out and fired with the following results:

- 1st, Austin, Texas, 662 x 750
- 2d, 8th Engineers, 658 x 750
- 3d, 12th Cavalry, 652 x 750.

The five best scores of the 12th Cavalry were: 1st Lt. Samuel L. Myers, 132; Staff Sgt. Ehhardt, 130; Sgt. Dedmon, 131; Sgt. Rademacher, 130; Pfc. Hutson, 129; making a total of 652.

Sergeant Henry G. Morgan, of Troop F, won high individual at 200 yards off hand with a score of 45.

13th Cavalry—Fort Riley, Kansas

COLONEL CHARLES F. MARTIN, Commanding

THE long, cold winter has at last broken, and except for those troops in quarantine, suffering the final effects of the usual winter influenza, etc., everyone is outdoors, and spring training is going forward with a great deal of success. Over two hundred recruits have been received within the past two months, and, in spite of the severe weather, their training has progressed at a satisfactory rate, and quite a few of them will soon have completed their recruit instruction. Remount training too has continued, and the receipt of two car loads of young horses added some zest and excitement to the winter riding.

Captain Paul MacK. Martin has been busy with a group of rifle experts for the past two months and has an excellent small-bore team that shot and won a close shoulder to shoulder match with the R.O.T.C. team of the Kansas State College at Manhattan.

Telegraphic matches with the 10th and 24th Infantry and 8th Cavalry were fired this week.

The regiment is losing three of its highly valued "old timers" this winter and spring through retirement. Master Sergeant Benjamin F. Longacre retired on January 31st after having completed thirty years' service as an officer and non-commissioned officer. Master Sergeant James Nelson retired on February 29th after almost thirty-one years' service and Master Sergeant Matthias Dolinsky will retire on March 31st with thirty years' honorable service to his credit.

There will be quite a few changes in officer personnel during the coming year in the regiment. Colonel Charles L. Scott will join the regiment in August, thereby relieving Colonel Charles F. Martin, who is detailed in the Inspector General's Department, with station in Washington, D. C., as of June 30th. Other additions to the regiment will be Lieutenant Colonel William H. Grimes, from Leavenworth; Major William E. Shipp, from Military Attaché duty in Riga, Latvia; Major Edwin E. Schwien from Leavenworth; Major John W. Carroll from Fort Meade, South Dakota; Captain Erle F.

Cress from Leavenworth; Captain Henry I. Hodes, from the Philippine Islands, and Lieutenants Harry W. Candler, Loren F. Cole, and Harry J. Fleeger from this year's student officer class at the Cavalry School.

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14th Cavalry—Fort Des Moines, Iowa

COLONEL CLARENCE LININGER, Commanding

DURING about six weeks of sub-zero weather the riding hall could not be made comfortable and the troops for the most part were busy coöperating with civilian relief agencies in opening up roads to coal mines and assisting in the delivery of coal to the destitute and to the various charity institutions. The problem of keeping the post roads open for traffic became a major one because of the high winds and drifting snow. However, animals were exercised daily.

During the month of February, troops were busy preparing for an exhibition which was held in the riding hall on February 22d as a climax to National Defense Week. The program began at 2:00 o'clock in the afternoon with a short band concert by the 14th Cavalry Band, followed by a thrilling scout car exhibition by the Headquarters Troop and a monkey drill platoon from Troop F. Machine Gun Troop presented a colorful sight in a musical ride and Troop E gave a jumping exhibition. A parade of all colors and guidons brought the exhibition to a close. About two hundred reserve officers and their families and many prominent city and state officials were present. Words of praise for the splendid exhibition and the conduct and appearance of men, horses and equipment were numerous.

The regimental small bore rifle team won a shoulder-to-shoulder match with the R.O.T.C. team from the State University of Iowa on February 28th by a margin of fourteen points.

Riding classes for civilians and reserve officers, postponed on account of the severe weather, have been resumed.

Remount training has been in operation continuously since the arrival of the new mounts and with spring weather not far distant this training should progress very rapidly.

Several new horses have been added to the polo string and it is hoped they will be ready to play by the time the outdoor season opens.

Colonel Clarence Lininger, the regimental commander, was a guest of the 1st Squadron at Fort Sheridan, Illinois, on March 5th, which was the thirty-fifth birthday anniversary of the 14th Cavalry. The 1st Squadron presented a squadron horse show and celebration for the occasion.

The regiment regrets that it will lose Colonel Lininger, who has been ordered to Fort Riley, Kansas, effective June 25th, as Assistant Commandant of the Cavalry School. It takes this occasion to say that he will be long remembered in the regiment as a brilliant and splendid

officer. He has done much for the regiment and the garrison and has won the respect and admiration of the entire community and state, and the regiment wishes everything good for his future.

Colonel John C. Pegram has been ordered to Fort Des Moines to replace Colonel Lininger as regimental commander and is expected to arrive about June 1st. The regiment extends him a cordial welcome.

Many changes in officer personnel have been made. Captain Robert MacD. Graham has departed for his new station at Fort Robinson, Nebraska, and Captains Mark A. Devine and William J. Bradley are slated to leave on or about August 1st for school details, the former to Fort Leavenworth and the latter to Fort Riley.

With the C.M.T.C. rifle instruction, the training of new recruits, and training of remounts, we anticipate an active and interesting season.

1st Squadron, 14th Cavalry—Fort Sheridan, Illinois

LIEUTENANT COLONEL HARRY D. CHAMBERLIN, Commanding

DUE to the very severe winter and heavy snows during January and February, most of the training activities of the Squadron were necessarily restricted to the riding hall. However, very valuable indoor instruction in tactics has been imparted to the officers and men in a school most ably conducted by Major Brock Putnam. Indoor polo three times a week in the riding hall and match games in Chicago each Saturday have provided the principal recreation for the officers. The Fort Sheridan Polo Team plays Detroit on March 14th to decide the Western Junior Indoor Championship.

For the enlisted men, weekly horseshows have been held, in which both jumping and schooling classes have been included. These shows have been marked by the

enthusiasm shown by the men, the development of horses and improvement of riders.

On March 5th the squadron appropriately observed the 35th anniversary of the Regiment's organization by a gala program consisting of a mounted review, a horse-show and gymkana. Lieutenant Colonel Chamberlin gave a very fine schooling exhibition on his recently acquired horse, *High Hat*. The squadron was signally honored by its many distinguished guests, which included Major General Frank R. McCoy, Brigadier General Dana T. Merrill, Brigadier General Charles D. Heron, Rear Admiral John Downes, United States Navy, and our Regimental Commander, Colonel Clarence Lininger.

Colonel Chamberlin will leave next summer to go on General Staff duty with the 1st Cavalry Division reporting at El Paso on September 13th.

26th Cavalry (PS.)—Fort Stotsenburg, P.I.*

*Mailed at Manila, January 13, 1936.

COLONEL E. KEARSLEY STERLING, Commanding

FOR the past three months our efforts have been devoted to Manila, Fort William McKinley and Fort Stotsenburg.

On October 22d, Major General Charles E. Kilbourne,



The last of the 26th Cavalry animals to cross.

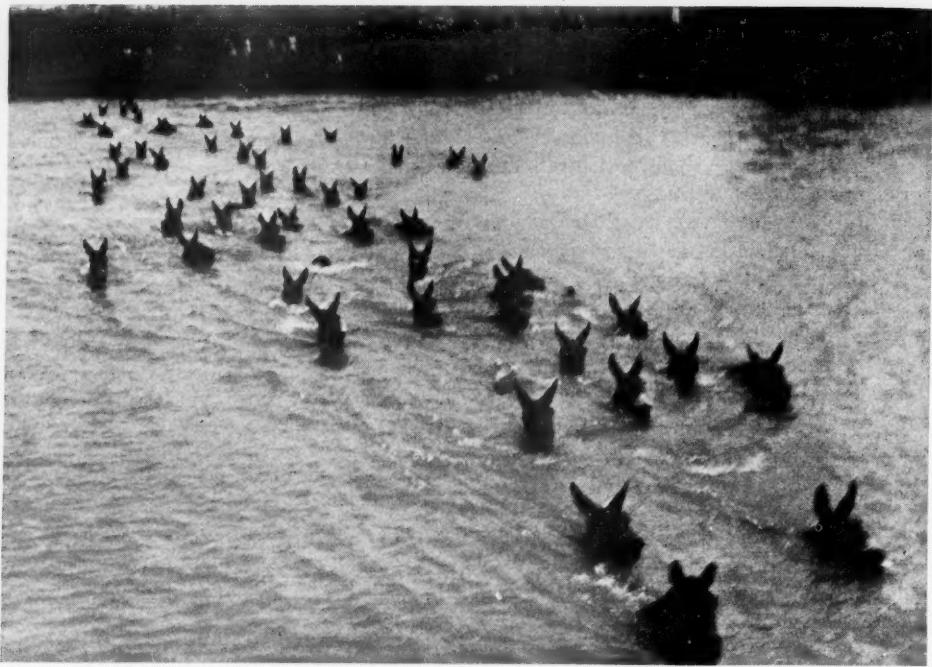
Acting Department Commander, held a tactical inspection of the regiment. The Second Squadron, Major Gordon J. F. Heron, Commanding, escorted General Kilbourne from the air field to the drill field where a post review was held in his honor.

On the 25th the alert call was sounded at 3:00 A.M. and by 5:30 all organizations of the post reported they were ready to move and had with them three day's rations and ammunition. At 6:00 A.M., Colonel Sterling, Acting Brigade Commander, issued his instructions for the problem which was a delaying action. After a hard day negotiating the difficult trails and hills south of

Crossing the Rio Del Pampanga River.

Officer on the left is Colonel E. Kearsley Sterling, the Regimental Commander; right center, Captain Marcus E. Jones, Regimental Adjutant. The gray horse in the lead is *Old Bill* who loves the water and is always used as guide in swimming any unfordable stream.

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26th Cavalry pack train crossing a stream.

O'Donnell the Regiment returned to the post at 6:00 P.M.

The post swimming meet was held the following day and the trying preceding day told on all the contestants.

On the 28th and 29th the regimental commander held a tactical exercise in delaying and rear guard action with the 1st Squadron representing the enemy. The regiment bivouaced for the night near the hydro-electric plant of Mabalacat.

Secretary of War Dern visited the post on Saturday, November 10th, being met by the 1st Squadron, Lieutenant Colonel Herbert E. Taylor commanding, and was escorted to the drill field where a post review was held in his honor.

The next morning the regiment left for Manila, a distance of 64 miles, where they escorted the following officials during the inauguration of the President of the Philippines: Troop F, Captain Frederick R. Pitts commanding, escorted Vice President Garner; Troop E, Captain Benjamin H. Graban commanding, escorted Secretary of War Dern; Troop B, Captain Charles R. Chase commanding, escorted High Commissioner Murphy and the Machine Gun Troop, Captain Redding F. Perry commanding, escorted President Elect Quezon. The regiment returned to its home station on November 20th.

On the 25th all officers, except one per troop, with 42 enlisted men took part in the 23d Brigade command Post exercise at Fort William McKinley.

Troop B, Captain Cary B. Hutchinson commanding, participated in the Army Relief Show in Manila on December 7th and 8th. They remained in Manila until

December 12th, to escort Major General Frank Parker, Commanding General, Philippine Department, who left for the States on that date.

Major Albert E. McIntosh, and 2d Lieutenants John L. Ryan, Jr., and Robert P. Lowe walked away with the honors in the Army Relief Horse Show. Lieutenant Lowe's riding was superb and on more than one occasion he had the spectators on their feet with his daring feats. He carried off the greatest number of trophies and won the highest number of points for any individual rider.

The 26th Cavalry (PS), again proved their superior training in crossing the Rio Del Pampanga River at Macabebe on the morning of December 19th. At this point the river is 125 yards wide and 36 feet deep with steep banks twelve feet above the water on both sides. At 10:30 A.M. a patrol from each rifle troop consisting of one rifle squad and one machine gun squad as covering force crossed the river and established a bridge-head north of Macabebe. By 12:30 P.M., the entire regiment had completed its crossing and was ready to resume its march to the north. All equipment was taken across in floats made of shelter halves and mantas, the horses being herded across by troops. Colonel Sterling was the first person of the main body to enter the water and on arrival at the far bank was cheered vigorously by the hundreds of spectators from Manila, Stotsenburg and Corregidor.

The regiment returned to its home station on December 21st, where it will remain until January 20th, when it leaves again for 30 some days or more on maneuvers.

On December 22d the first polo tournament of the season for the Fort Stotsenburg Championship got underway. The Cavalry White Team, consisting of Captain

Hutchinson, No. 1; Major Cunningham, No. 2; Captain Hodes, No. 3; and Captain Jones, No. 4; won by defeating the Artillery. On December 29th, the finals of the Class B tournament was won by the Purple Team consisting of Lieutenant Allan, Lieutenant Sheldon, Captain Withers and Captain De Bardeleben.

We are all looking forward to the arrival of the U. S. Transport U. S. Grant which will bring Major Roye P. Gerfen, Captains Paul C. Febiger, Mortimer F. Sullivan, Thomas Robinson and Zachery W. Moores, and 1st Lieutenants Wayne J. Dunn and Brainard S. Cook to our regiment.

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116th Cavalry, Idaho National Guard

COLONEL SAMUEL D. HAYS, Commanding

THE regimental training activities have progressed satisfactorily during the winter. At the time of this writing much stimulation has been caused by the distribution of the check sheets in preparation for the annual armory inspection.

It is believed that the regiment has made several accomplishments worthy of note: Responding to a campaign instituted by Major John D. Hood, Cavalry, our instructor, all officers have subscribed to the CAVALRY JOURNAL with the purpose of increasing their interest in the Cavalry and furthering their military knowledge. Each unit (ten) keeps a council book posted, balanced, audited, and a report is published quarterly showing the total troop funds within the regiment. During the last fiscal school year of the Extension Course, 5,351 credit hours were accumulated and 450 certificates were issued. It is believed that for armory drill attendance, Troop K, Moscow, Idaho, Captain N. A. Brenn commanding, has made an enviable record. During the month of January, 1936, this troop maintained an enlisted strength of 61 men and 3 officers (the authorized strength): five drills were held with the absence of only three men for the entire month.

The instruction memorandum, issued in quantity to each troop, covering the mechanics of the "Riley seat" and jumping over obstacles, has resulted in a marked improvement in horsemanship. There are many young mounts now in the regiment and the development of several show horses is expected. Troop K has a rabbit-jumping horse. This animal clears the average jump readily but always lands (first) on his hind feet. It is an amusing sight to watch this "clown" while freak jumping.

The regiment is fortunate in having two of its troop commanders, Captain L. R. Clemons, Headquarters Troop, and Captain R. L. Reynolds, Troop F, detailed for a course of instruction at the Cavalry School where they are now enrolled as students. They will have a high mark to aim at, set by their predecessor, Captain C. R. Bevington, who graduated at Fort Riley last year with honors.

Headquarters Troop, 1st Lieutenant S. W. Davis temporarily in command, is making rapid progress in the section and radio training, and small bore firing of their large number of recruits.

The commander of the Band, Captain C. L. Isenberg, says he will be able to recruit this unit up to the authorized strength, new tables of organization.

Many improvements have been made in the Cavalry armories throughout the state. Machine Gun Troop, Captain E. W. Horner commanding, has done especially well.

Troop A, Gooding, has given two interesting horse shows under the guidance of the troop commander, Captain C. R. Bevington. This troop also boasts a creditable polo team.

Troop B, Captain P. L. West commanding, has made marked progress in every phase of training and drill attendance after experiencing many reverses. Much credit is due to the former commander, Captain E. B. Roche.

We are looking forward with much interest to the completion of the new addition to the armory at Boise. The riding hall will be of sufficient size to conduct a horse show, and, at the same time, enable the engineers and field artillery to add interest to the show by displaying their special training. Troop E, Captain Wm. H. Abendroth commanding, which will be housed in this armory, has developed a polo team of considerable reputation. A fine outdoor polo field is located near the armory. They plan to play indoor polo when the armory is completed.

On the return of Captain R. L. Reynolds, Troop F, Nampa, detailed to attend the Cavalry School, we expect his troop to become quite "horsey." 1st Lieutenant G. H. Potter will command during his absence.

For smartness in appearance, discipline and steadiness in rank, the men of Troop I are outstanding. Inspection of arms is executed as one man. The attendance of this troop, Captain S. R. Lough commanding, is always excellent.

Instructions and targets have just been issued to all troops to be used in the regimental rifle match, .22 caliber. The National Guard small arms match for Idaho, carrying the Adjutant General's trophy, was won last year by Troop K, Captain H. A. Brenn commanding. Keen interest throughout the state is shown in this competition.

The Medical Unit, under the keen interest of their capable commander, Major R. E. Talbot, Medical Corps, has become a credit to the regiment. The smart appearance and soldierly bearing is commendable. The drill attendance of this unit is often one hundred per cent for the month.

The officers and men of the 116th Cavalry extend their congratulations to Brigadier General M. G. McConnel, Idaho National Guard, recently appointed to command the 58th Cavalry Brigade. He is the first National Guard General from Idaho.

305th Cavalry—Philadelphia, Pa.

LIEUTENANT COLONEL ROBERT R. D. McCULLOUGH,
Cavalry-Reserve, *Commanding*

THE activities of the 305th Cavalry during the current inactive training period seem to reflect the thought that life should hold one profound interest and a thousand minor ones.

Under the personal supervision of the Unit Instructor, Colonel Arthur H. Wilson, for our profound interest we have concentrated on all phases of Cavalry instruction. Equitation has been given new life and meaning with an eye to the general improvement of our horsemanship, and in particular to touching up our best riders who will compete in a horse show, at present somewhat embryonic in outline but one of the attractions set along the near horizon.

The thousand minor interests are evident in the selection of our guest speakers and in our plans for the future. Among our Wednesday noon speakers we have had Major John V. Rowan, Quartermaster Corps, who gave us "The Supply of a Division" to think about; Colonel Albert G. Love, Medical Corps, who made "Field Sanitation" a clever picture; and Lieutenant Colonel Levin H. Campbell, Ordnance Department, who brought us around to thinking of "Scout Cars" from that Cavalry viewpoint.

Future interests beaconing us along the way include Regimental Day on April 17th, when instead of the special ride featured this day for several years, there is to be held an old fashioned regimental dinner! What a good meal (with the trimmings) will do to a group of Cavalrymen, is traditional. Well, we're ready!

Another event will be the parade and ceremonies annually held under the auspices of the Military Order of the Loyal Legion, on the Parkway, Philadelphia. This will take place on April 19th.

On May 16th-17th strange figures will probably be seen moving about in the shadows of the night in out-of-the-way places near Philadelphia. It is then that the regiment will undertake an overnight tactical ride. We expect to make the most of it!

We conclude with a sport note. The 305th Polo Team (yes we have one) reports five games with three victories and two defeats. Two games were lost to the 112th Field Artillery, Camden, New Jersey, and two games were won from the same team. The third victory was scored over the P. M. C. Junior Varsity.

306th Cavalry—Baltimore, Md., and Washington, D. C.

COLONEL J. P. B. CLAYTON HILL, Cavalry-Reserve,
Commanding
WASHINGTON

DESPITE the unusually intense cold prevailing during the recent winter months the conference schools, equitation classes, and other activities of the regiment

have been carried on with excellent attendance.

Conferences for the instruction of officers were held in Washington on January 9th and 23d and on February 6th and 20th, with most of the instruction conducted by the officers of the regiment.

Major Geary F. Eppley, assisted by Captain R. C. D. Hunt, both of the 306th, presented an exceptionally well prepared and helpful conference on the "Conduct of an Advanced Guard."

Lieutenant Colonel J. D. Stout, and 1st Lieutenant H. S. Hartley, both of the Military Intelligence Reserve, were scheduled to give a presentation on "Military Intelligence, with particular reference to Cavalry as a Military Intelligence Agency" on March 5th.

The regiment has been greatly privileged to hear the following officers: Major General Leon B. Kromer, The Chief of Cavalry, who spoke on "Cavalry"; Major Rosenham Beam, Air Corps, who spoke on "Aviation, its Organization and Characteristics; Coöperation with Cavalry Units"; Major Charles A. Willoughby, Infantry, who spoke on "The Palestine Campaign"; Lieutenant Colonel Charles H. Corlett, General Staff Corps, who spoke on "Combat Orders"; and Major John C. Mullenix, Cavalry, who has spoken on "Principles of Cavalry in Delaying Action" and on "Stonewall Jackson's Campaign in the Shenandoah Valley."

Equitation classes were held at the Fort Myer riding hall, on January 12th and 26th and on February 9th and 23d.

At the present time a large part of the regiment is receiving excellent administrative training by reason of the fact that it has approximately twenty officers engaged in C.C.C. work. 1st Lieutenant E. M. Perkins, 306th Cavalry, has been detailed to the Cavalry School at Fort Riley to take the Special Course for National Guard and Reserve Officers.

On Sunday afternoon of February 9th the Annual Regimental Service was conducted at St. John's Episcopal Church by the Regimental Chaplain, Captain Oliver J. Hart, Chaplains Reserve Corps.

BALTIMORE

Regular monthly conferences of the Baltimore officers were held at Howell House, Baltimore on January 13th and February 24th. At the January meeting the Unit Instructor, Major John C. Mullenix, Cavalry, presented the subject "Cavalry in Pursuit," one of a series covering the functions of the Arm, with the usual highly interesting and instructive charts and maps. While calling for much detailed work of preparation, the generous use of such aids has been reflected in a gradually increasing attendance since the season's start. Devoting the first half of the period to a related subject, presented by a Reserve officer, and then applying the lessons set out in a map problem, often with historic examples of various campaigns, ancient and modern, has made those present feel the high instructional value that can be received from regular conference attendance.

At the February meeting the upward trend in attend-

ance was again evident. The series of Cavalry problems started early in the school year was continued with an "Advance Guard" map problem, supervised by Captain Ellis O. Keller, 306th Cavalry.

The promotion is announced of 2d Lieutenant Graham Dukehart, to the grade of 1st Lieutenant.

307th Cavalry—Richmond, Virginia

**COLONEL MATTHEW F. JAMES, Cavalry-Reserve,
Commanding**

THE regiment added a full colonel to its roster on January 25th, in the person of Matthew F. James. Perhaps the best impression of him is contained in his letter of greetings to the regiment, which follows:

"Assignment to the command of the 307th Cavalry brings a feeling of indefinable pleasure, something like that of getting back home after a long absence, for, while I happen to reside in Maryland at present, Virginia has always been home to me. I was reared there, lived in Richmond for thirty-five years and served with Virginia troops (Richmond Blues) for fifteen years—through the World War. Naturally, therefore, I am happy to command the Virginia Cavalry regiment."

"No one can review the roster of the 307th and fail to be impressed by the high quality of its personnel, nor could one have observed the regiment on active duty, as I have at summer camps during the last several years, and fail to be impressed by its military proficiency and its esprit.

"It is unfortunate, of course, that due to dispersion, absence of very large urban centers and lack of mounted facilities, we are handicapped in inactive training. However, inasmuch as this weakness is one inherent in our geographical situation, we can only make the best of it and resolve to keep up our competitive standing with the Pennsylvania and Maryland units by doing more extension work and attending group schools where possible. I know you will not let the Virginia regiment suffer by contrast."

"I am genuinely proud to command the 307th Cavalry and look forward with much pleasure to service with you."

The Regimental Historian, Captain L. L. Montague, has submitted its history, in accordance with Army Regulations. It is a monumental work, worthy of a V. M. I. History Professor, which he is. Copies will be sent to each officer, and any others who apply.

This regiment is slated to conduct the C. M. T. C. training at Fort Myer, Virginia, July 5th to August 1st. The spring rush to accumulate credits and qualification for this active duty appears to be on; extension school lessons submitted in February being 400% greater than in preceding months.

Major Edward N. Hay has been transferred to the 305th Cavalry.

3d Squadron and Machine-Gun Troop, 307th Cavalry—Norfolk, Virginia

**MAJOR JAMES R. MULLEN, Cavalry-Reserve,
Commanding**

SINCE the 307th Cavalry has been designated for C.M.T.C. training next summer, schedules for the period March 1st-June 30th, will emphasize the detailed training of the individual, squad, platoon, and troop, with great attention to accuracy. It is expected that about thirty troop officers and two field officers of the regiment will be ordered to active duty this summer, and we hope that the 3d Squadron and Machine Gun Troop will be strongly represented. It will be the best chance for active duty that we have had for several years.

Our pistol practice has been progressing steadily. After the last conference the class had a one-hour session at the armory, firing slow, rapid, and quick fire. We should be ready to turn out a few experts and sharpshooters when we fire for record in June.

1st Lieutenant Robert B. Batte, of Norfolk, has received his long awaited Captaincy, and continues in command of Troop K.

1st Lieutenant Woods G. Talman, of 3d Squadron Headquarters, who is in command of a C.C.C. Company at Fort Story, near Norfolk, gave a very interesting and instructive talk at the group school meeting on February 20th, on some of the practical aspects of his work.

308th Cavalry—Pittsburgh, Pa.

**COLONEL GEORGE H. CHERRINGTON, Cavalry-Reserve,
Commanding**

THE first half of the inactive training year has passed smoothly with good attendance at conferences. The second half promises to be even more successful.

Now that the hardest winter in years is about over and occasional good days are appearing, the demand for the horses owned by the regiment is exceeding the supply on week-ends. Extended rides on roads and across country are now being held each Sunday. In the near future, as days become longer, evening classes will begin.

One of these classes will be held weekly especially to prepare the enlisted members of the regiment for early examinations for their commissions and to refresh the second lieutenants in subjects they will require at summer camp.

On February 23d Captain Jean T. Ross left Pittsburgh by automobile for the Cavalry School, where he is pursuing the course for National Guard and Reserve Officers.

The following changes in the regiment are announced:

2nd Lt. Hugh R. Parks promoted to 1st Lieutenant.

Major Basil H. Minnich, moved outside Third Corps Area.

862d Field Artillery (Horse)—Baltimore, Md.

**COLONEL ROGER S. B. HARTZ, Field Artillery-Reserve,
Commanding**

LIEUTENANT Colonel Cuyler L. Clark, Field Artillery, has reported for duty as unit instructor with the regiment. Colonel Clark comes from Fort Bragg, North Carolina, where he was assigned to the 17th Field Artillery.

The spring training schedule will include more practical work than has been possible during the winter. Special emphasis will be given to use of instruments, conduct of fire, and minor Field Artillery tactics.

**65th Cavalry Division—Illinois, Michigan,
Wisconsin**

AT the meeting of the 65th Cavalry Division Association held at the Great Northern Hotel on January 16th, the following were elected officers of the association for 1936: President, Captain H. M. Hopp, 318th Cavalry; 1st Lieutenant Roland Williams, Headquarters 317th Cavalry; 2d Vice-President, Colonel Irving Odell, 865th Field Artillery; Secretary, Captain J. T. Seaman, 318th Cavalry; Directors, Major A. J. Bain, 405th Engineer Squadron, Lieutenant Colonel P. P. O'Connor, Division Surgeon and Captain B. O. Schroeder, 317th Cavalry, 1st Lieutenant Roland Williams, Headquarters Troop, 65th Cavalry Division, spoke on "Problems Involved in Exclusive Motorization," a subject which resulted in considerable discussion during the meeting. Lieutenant Colonel Harry D. Chamberlin, 1st Squadron, 14th Cavalry, gave a most interesting and instructive talk at the March meeting, on "Modern Horse Cavalry."

Lieutenant Colonel W. A. Peterson, 318th Cavalry, and staff and squadron commanders, were engaged in a War Game with the 33d Division, Illinois National Guard, conducted by Colonel Geo. C. Marshall, Infantry, during January and February, which culminated on March 1st with an all day CPX at the 131st Infantry Armory. The brigade and regimental staff and regimental enlisted personnel will participate in the CPX's to be held in April and May. Many members of the staff were on the Cavalry Corps Staff of Colonel Edward Davis and have received excellent instruction through his well conducted CPX's.

Severe cold weather was responsible for a falling off in attendance at the Tuesday evening equitation classes. The Sunday morning classes at Fort Sheridan, however, maintained their popularity, under Colonel Isaac S. Martin, Cavalry.

Lieutenant Colonel M. D. Mills, Quartermaster-Reserve, and Major A. L. Johnson, Air Corps-Reserve, have been appointed Division Quartermaster and Division Air

Officer, respectively. Staff meetings were held monthly scheduled.

The promotion of Major P. P. O'Connor, Division Surgeon, to rank of Lieutenant Colonel was announced.

Captain Wm. N. Todd, Jr., Cavalry, who has been on duty with the division for the last four years, will leave this summer for duty with the 10th Cavalry at Fort Leavenworth. His excellent work with the division will be long remembered. Forty-five officers of the 159th Cavalry Brigade will go by motor in May to inspect the site designated as the Division Mobilization Station.

Colonel Siqueland, 317th Cavalry, announced on March 27th the new assignment of officers necessitated by many changes in the regiment during the year.

66th Cavalry Division

THE eleventh annual gathering of the Cavalry Reserve Officers of Greater Kansas City, was held Saturday, February 1st, at the Ambassador Hotel.

Brigadier General Herbert J. Brees, Commandant of the Command & General Staff School, Ft. Leavenworth, was guest of honor; he gave an instructive lecture on the Cavalry of the future as he saw it, the theory of which was that future Cavalry units in advances probably would be preceded or accompanied by mechanized units, the horse Cavalry performing its mission between the advanced units and the Infantry; the reverse situation was pictured if used in retirement actions. That both mechanized Cavalry and horse Cavalry would be essential in open warfare appeared to be a final thought. The discussion will provoke much thought on the part of Cavalry tacticians.

Colonel Henry W. Baird, who started the ball rolling back in 1924 when he was the only officer on duty with the small handful of organized Reserves here, and who attended the first Cavalry banquet in 1926, came the long distance from Fort Knox, Kentucky, to attend. He was accompanied by Major Burton C. Audrus. Colonel Baird was warmly received by his host of friends, who knew him affectionately as "Major Baird."

General E. M. Stayton, war-time commander of the 110th Engineers, and now the ranking general, Missouri National Guard, attended. His record of many years of selfless support of Reserve activities has gained for him the gratitude of Reserves and Regulars alike.

Others who attended included not only officers from Kansas City but many from other sections in and outside of Missouri.

Colonel Hugh H. Broadhurst, coordinator of reserve activities in Greater Kansas City, and for the 66th Cavalry Division throughout the Seventh Corps Area, contributed largely to the usual outstanding success of the gathering.

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